





anthro notes

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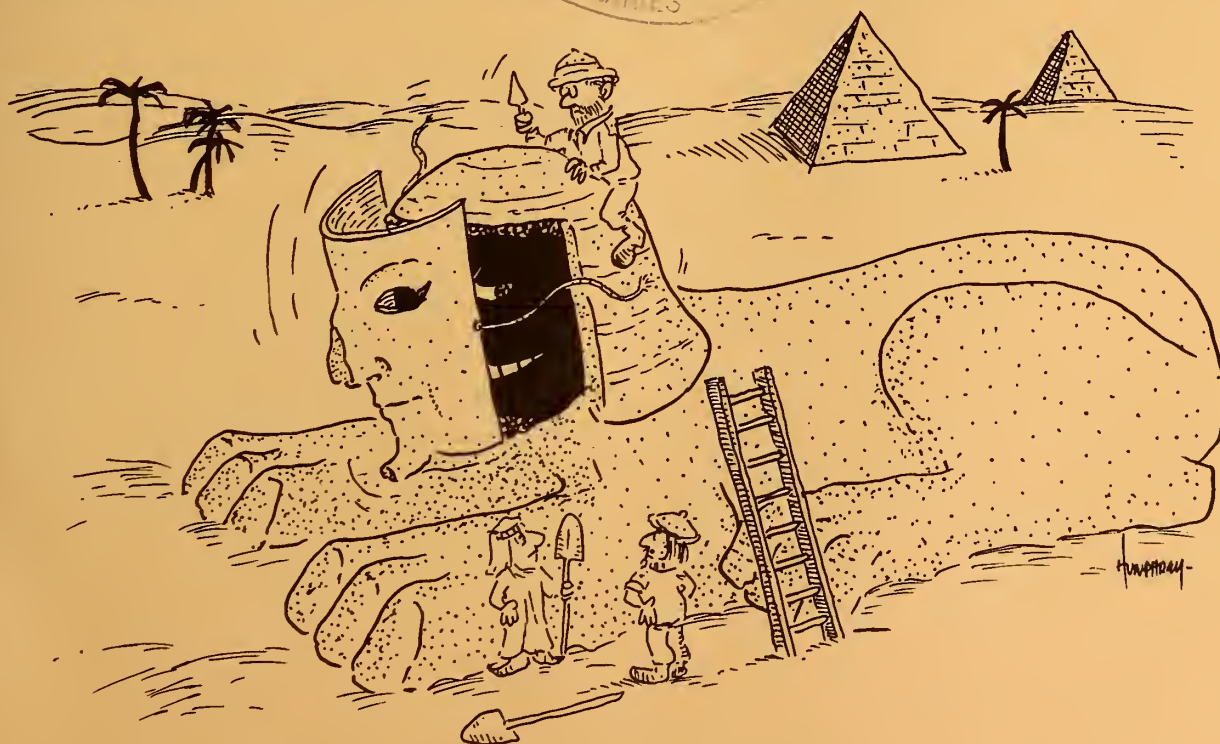
THE ROOTS OF ANCIENT EGYPT

Who were the ancient Egyptians? Should the origins of their magnificent achievement be sought in the Middle East or in Africa? Were they themselves "White" or "Black"? These questions have been disputed by scholars since the beginnings of written history. Most recently, anthropological studies of human remains from northeast Africa, together with new archaeological evidence from Egypt and Nubia, offer us a new understanding of Egyptian origins in which Africa played the major role.

Africa and Egypt: Pre-1945 Views

Early writers described the Egyptians as dark-skinned and woolly-haired (Herodotus) with origins in or close ties to the ancient peoples and cultures of Ethiopia (Diodorus of Sicily, Strabo). In the 18th

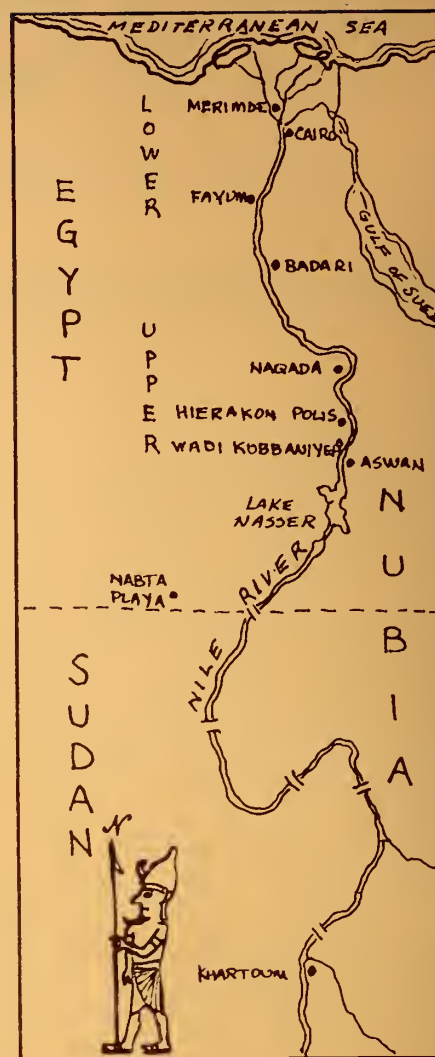
century ancient Egyptian civilization was "rediscovered" by travellers (and plunderers) from Europe, whose view of the ancient Egyptians was drawn largely from Egyptian art, in the absence of scientific archaeology or a code for deciphering hieroglyphic writing. After viewing the undamaged profile of the Sphinx, which the French author de Volney described as "Negro in all its features," he wrote: "Just think that this race of black men, today our slave and the object of our scorn, is the very race to which we owe our arts, sciences and even the use of speech! Just imagine, finally, that it is in the midst of peoples who call themselves the greatest friends of liberty and humanity that one has approved the most barbarous slavery and questioned whether black men have the same kind of intelligence as whites" (de Volney 1787:



74-77). As late as 1829, de Champollion, the decipherer of hieroglyphic writing, described a bas-relief in which the most "primitive" figure is a light-skinned, tattooed European barbarian wearing skin clothing, in contrast to the dark-skinned white-clad Egyptian described in the accompanying hieroglyphic legend as "the race of men par excellence."

In the 19th and 20th centuries, scholars attempted to exclude African cultures and Africans themselves from the origins of Egyptian civilization. Within ten years of 1829, de Champollion's own brother attributed the achievements of ancient Egypt to a separate "race" of reddish-brown-skinned Moors, whom he considered a variant of the "White" race due to their straight hair. In the absence of any in-depth study of skeletal remains or mummies, this quickly became the dominant view. While Elliot Smith and the diffusionists of the early 20th century were attributing all "civilization," and indeed all invention to an original center in Egypt, the leading American Egyptologist J. H. Breasted argued that Egypt was racially and culturally part of the same sphere as the adjacent region of western Asia. To Breasted, Egypt was separated from "the teeming black world of Africa...by an impassable desert barrier...Thus isolated and at the same time unfitted by ages of tropical life for any effective intrusion among the White Race, the negro and negroid peoples remained without any influence on the development of early civilization" (1926:113).

The idea that ancient Egyptians owed nothing to Africa was reinforced by the view that the ancestors of most present-day populations of eastern and central Africa arrived in these regions within the last 2000 years. Their predecessors in the Nile headwaters area were ancestral primarily to Caucasians (L.S.B. Leakey 1935) or Kalahari bushmen (Woodward 1938). As a result, even if archaeology could show that the Egyptians had migrated down the Nile from its headwaters area, any "Black" contribution to their culture, or link to most of the present inhabitants of sub-Saharan Africa, could be discounted.



First Settlers and Farmers: 7000 - 5000 BC

From Khartoum in the Sudan, the Nile flows northward through increasingly arid desert hinterlands. Nubia, with its rocky landscape of gorges and cataracts gives way north of Aswan to the flatter floodplains of Upper Egypt, and, near modern Cairo, to Lower Egypt and the Nile delta region. The agricultural economy of ancient Egypt was based on wheat, barley, flax, date palms, cattle, sheep, goats, pigs, and donkeys. Only the latter was considered an indigenous African domesticate; the others, together with the idea of domestication itself, were thought to be Near Eastern imports, particularly since the earliest agricultural settlements in Lower Egypt appeared much later than their Near Eastern counterparts.

Recent archaeological work in Upper Egypt, the Sudanese Nile Valley, and Egypt's western desert has presented a different picture of Egyptian origins. Except for a few intermittently-occupied sites in the Nile Valley (e.g. Wadi Kubbaniyeh), northeast Africa was deserted during the severe drought corresponding to the last ice age, about 18,000 years ago.

The climate became much wetter as the ice age ended, beginning about 13,000 years ago and continuing to about 6,000 years ago (ca. 4,000 B.C.). While nomadic hunters and gatherers continued to exploit the wild resources of the Egyptian Nile Valley, signs of increasing sedentism appear in the Sudanese Nile Valley. The first African experiments with domestication may have occurred in the western desert. In Sudanese Nubia towards the beginnings of this period, around 9000 years ago (7000 BC), the dead were buried in collective cemeteries, suggesting a more sedentary existence. Many of the skeletons at one such cemetery (Jebel Sahaba) appear to have been killed with stone tools, implying a degree of organized violence or warfare not characteristic of sparse populations of nomadic hunter-gatherers (Wendorf 1968). At Khartoum and other sites in the Sudan, hunters of buffalo and a variety of other game built mud-plastered structures, fished with bone harpoons, and made pottery decorated with wavy lines, all suggesting some degree of sedentism.

Although no domesticated plants or animals are associated with the Nile Valley settlements during this time, domesticated cattle, presumably descended from local wild ancestors, have been identified at several sites in the oases and playa lakes of the western desert as early as 9000 years ago. That is about the same date as the earliest domesticated cattle in Europe or the Near East. Evidence of domesticated cattle at the Egyptian sites is based not only on minor differences in size and shape with the wild forms but also on the fact that the rest of the animal bones all come from animals smaller than a gazelle. If large animals such as cattle were present in their wild state, reason the authors, there would be more than one large species. This finding has been disputed by other scholars (see Clark and

Brandt 1984). By 8000 years ago, the large permanent village of Nabta Playa, with its stone-lined houses and storage pits, well-made pottery decorated in the Khartoum style, domesticated (six-row) barley grains and date palms, and a few bones of unquestionably domesticated cattle attest to the full development of a food-producing economy based on indigenous African domesticates.

Around 7500 to 6400 years ago, the desert climate was particularly humid and favorable to pastoral production. To the north, by 7000 years ago (ca. 5000 B.C.), domesticated sheep and goats, pigs, and emmer-wheat, none of which are native to Africa, together with domesticated cattle, dogs, cultivated barley, and flax formed the economic basis at the first villages north of Cairo in the Nile delta. The easternmost of these villages may have been in contact with Near Eastern early farmers, providing a route for the transmission of Near Eastern domesticates, which appear in the final stages of desert cultures to the South. Toward the end of this period, increasing drought may have forced the western desert pastoralists back to the Nile Valley, still occupied by hunting and gathering groups. This crowding and mingling of cultures may have precipitated the first settlements in the area of the Nile Valley south of Cairo, where Egyptian civilization actually arose.

Predynastic Egypt

During the predynastic period before the beginning of the First Dynasty (ca. 3100 B.C.), some of the most distinctive characteristics of Egyptian culture appeared in the area of Upper Egypt. These included hieroglyphs, an extraordinary emphasis on mortuary ritual including human and animal mummification, animal deification, maceheads as symbols of royal power, precious stone jars and cosmetics, and pharaonic kingship, in which the ruler as deity not only controls but also personifies the nation. Increasing cultural complexity is reflected in the emergence of differential access to wealth (social stratification); specialized manufacture of pottery, metals, and luxury goods; organized trade between regions; monumental architecture; irrigation

agriculture requiring centralized control; greater population densities; and regional conquest or political integration.

Scholars dispute the extent to which each of these features developed indigenously or was imported (or at least strongly influenced) through contacts with the Near East. Aside from the Near Eastern domesticates, which probably spread into Africa through intermediaries in the Nile delta region, there is very little evidence for direct contact between predynastic Upper Egypt and the Near East before the latter part of the predynastic period, ca. 3500 B.C., or even later. What is the evidence for the local development of cultural complexity before this date?

Four main stages of predynastic development have been recognized: Badarian (ca. 4400 to ca. 3800 B.C.), Amratian or Naqada I (ca. 3800 to 3500), Gerzean or Naqada II (ca. 3500 to ca. 3200), and protodynastic or Naqada III (ca. 3200 to 3100 B.C.). Even in the first stage, elaborate burials containing luxury goods from other African regions presage the cult of the dead and attest to differential wealth. Specialized manufacture of pottery, stone jars, and cosmetic palettes is also evident. While hammered copper could have come from the Near East, its absence in Lower Egypt suggests that both raw materials and techniques of manufacture may derive from African sources.

By the second stage (Amratian), incised marks foreshadowing hieroglyphic writing appear on some of the pots, and a few especially rich graves contained distinctive maceheads, later symbols of kingly power. As in the Badarian, Near Eastern origin is a possibility, but the lack of intervening links in Lower Egypt suggests local development.

The development of cultural complexity accelerates during Gerzean times, when a wall-painting in one of the largest brick-lined tombs depicts a ruler with a mace preparing to kill several bound captives (Hoffman 1988: 42). The earliest-known temple complexes also date from this time. On the pottery, painted red boats are often shown with standards on poles bearing

different signs, some identical with later hieroglyphic names of gods. Copper was cast into daggers and other tools, stone bowls and jewelry were made in a range of precious materials--alabaster, amethyst, gold, silver, ivory, lapis lazuli, and turquoise. Throughout early Egyptian history and prehistory most of these precious materials, except for lapis lazuli, came from the south, the Sudan, and, later, Ethiopia.

By the end of the Gerzean, Mesopotamian-type cylinder seals, wavy-handled pottery imported (or copied) from Palestine, and some artistic motifs such as a man holding the necks of two leaping animals suggest more direct or at least more extensive contact with the Near East. The final predynastic stage (Naqada III) was marked by the emergence of hieroglyphic writing; mummification, particularly of animals placed around royal burials; stone or brick tombs in a "Near Eastern" style; the unification of Upper and Lower Egypt; and the emergence of pharaonic rule. Although some scholars have emphasized the role of the Near East in the emergence of the Egyptian state, others have noted that the evidence for direct contact is still tenuous; manufactured objects from Upper Egypt have not been found in the Near East. Instead, the evidence points to indirect contact through an intermediary people in the Nile delta who traded their own pottery as far as the coast of Canaan, but who were independent both politically and culturally from the Gerzeans.

Direct relationships between predynastic Egypt and regions to the south are somewhat better documented. In Nubia, the "A-Group" peoples were closely linked to late predynastic and early dynastic Egyptians, as reflected in similar burial customs; imported pottery, copper objects, and stone palettes; linen clothing; and the economic base of cattle, sheep, goats, wheat, and barley. At one series of tombs in Nubia, representations of kings with captives and hieroglyphic signs suggest the conquest of Upper Egypt and possibly Libya by Nubia. Does this indicate that the concept of kingship that underlies pharaonic rule actually originated in Nubia (Williams

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TEACHER'S CORNER: SOUTHEAST ASIAN NEW YEAR CELEBRATIONS

[Editor's Note: Ang Robinson directs a new outreach project titled "New Americans--New Challenges" in the National Museum of Natural History's Education Office. The project's goal is to promote understanding and appreciation of cultural diversity between the American public and the newly arrived Southeast Asian refugees and immigrants in the greater Washington area.]

With more than a million Southeast Asian refugees and immigrants having settled in the United States since 1975, the American public has grown increasingly interested in the cultural heritage of these newcomers. Demographic change has prompted many school systems to develop educational materials on Southeast Asian history and cultures creating a better understanding of the cultural differences among students of South-east Asian heritage. This teaching activity describes how the Southeast Asian-American community, specifically the Cambodians, the Laos, and the Thais, celebrate New Year's Day and offers some suggestions for classroom activities.

The New Year's Celebration

The name of New Year's Day differs in each language. In Khmer, the Cambodian language, New Year's Day is called Col Chnam; in Laos, Boon Pee Mai, or the fifth month Boon; and in Thai, Wan Songkran, or the Water Festival. Col Chnam, Boon Pee Mai, and Wan Songkran are national holidays in Southeast Asia. They usually fall on April 13, when the sun leaves the sign of Pisces and enters the sign of Aries, according to astrologers. For centuries astrologers have been influenced by the Bramanic (Hindu) calculation, and they determine the length of the festivities. New Year's Day also marks the beginning of the rainy season, from April or May until the end of October, and the planting of rice after several months of hot, dry days. In upcountry Thailand, Wan Songkran is also an occasion for rain-invoking ceremonies if the reservoirs, ponds, and wells are dry and the sky offers no sign of rain.

City people generally celebrate the first day of the New Year while country people

welcome a new and happy year for at least three days. On the last day of the old year, and in preparation for the new, people clean out their houses to drive away any evil spirits, bad luck, or disaster that may have lingered over the year. The next day, actually the first day of the calendar new year, is a day of rest during which all work is forbidden. The following day is for the celebration of New Year's.

Col Chnam, Boon Pee Mai, and Wan Songkran are temple-centered ceremonies like many other religious holidays in Southeast Asia. While New Year's Day is a deeply religious holiday, it also is an occasion to integrate all kinds of activities involving food, games, and the arts, which may take place in town halls and in the open air.

Each household prepares food that is brought to the Buddhist temple either the evening before or the morning of New Year's to serve to the monks. Food offerings are a way of "making a merit" or performing a good deed (or Boon). After the monks eat the food, they chant and offer a blessing to the people, who receive this blessing in a wai (pronounced "y") position, with the palms of the hands pressed together, to show their respect to the monks. In the temple, men and women sit with both knees folded closely to their bodies, their feet directed away from monks and Buddha images as a sign of respect. Men also have the option of sitting cross-legged.



Besides food, people donate money, which is another way of "making a merit." They also bring flowers, incense sticks and candles, which they light in front of the Buddha images and make New Year's wishes. Buddha images are housed year round in the vihara, a central structure on the temple grounds, and for New Year's are placed in a small pavilion on an altar where they are accessible to the worshippers. In some places, Buddha images are carried in a procession through the streets.

The temple ceremony includes the sprinkling of flower scented water, blessed by the monks during the food-offering ceremony, over the Buddha images to cleanse them. The people form a line, and as they sprinkle water over the Buddhas, they make a wish asking for good health, a bright future, and happiness and prosperity for themselves and their families.

Another temple rite is the building of sand mountains, which can vary in size from a quite small to several feet high, and there are different beliefs associated with them. Some people believe that the number of grains of sand are equivalent to the number of years they will live or the amount of money they will make. The sand also has a practical use. The monks can build new construction on the temple grounds. Big silver bowls often are used to heap sand into little mounds to build a structure resembling a "chedi" or "stupa" (a large cone-shaped religious structure). In Southeast Asia, small stupas or chedis are also built along sandy river banks where temples and homes are located. These small sand mountains may be decorated with coins, strips of cloth, flowers, and paper flags, depicting an animal symbol from the Chinese zodiac.

Su-Kwan is an important element of the Lao/Northeastern Thai New Year's celebration. "Su" means "to invite" and "Kwan" refers to "the soul." Su-Wan is usually held on the third day of the festival when people visit respected figures of the community as well as relatives and friends who live outside the village. It is also a time for young people to ask their elders for forgiveness for any wrongdoing they might have done in the past year and for blessings for the year ahead. The host prepares a flower arrangement over which large numbers of white strings are draped. The family invites Moh pon, the blesser, the most knowledgeable member of the community, to lead the Su-Kwan

ceremony. Moh pon will chant a few magical formulas to chase away sickness, pain, suffering, and evil spirits and to beckon good spirits to return to the souls of the ceremony participants. Next is the blessing of the white strings. The Moh Pon makes a knot with a piece of string to symbolize a successful return of the soul. Then he ties the string around the wrist of a person to be honored by the family. The person who has been blessed should keep the string on for at least three consecutive days for good luck.

Evening is a time fun, games, and entertainment. People gather at the temple or town hall to enjoy traditional and folk dances, music, and drama after travelling through the streets sprinkling water on one another and eating and drinking and singing and dancing from village to village.

Most Southeast Asian-American communities have condensed their traditional three-day celebration of New Year's to one day to accommodate life in their new home.

Suggested Classroom Activities:

1. Research project. Group three to four students together. Each group chooses a Southeast Asian country and researches its geography, climate, ethnic groups, holidays and festivals. Then each group presents its findings to the class.
2. Interview a cultural specialist. Invite, a cultural representative to the classroom (a parent or student may be willing to participate). The following questions may be helpful:
 - a. Who in the community celebrates New Year's Day? (Consider age groups, clergy, and laity.) What are their roles? Are there some groups in the Southeast Asian community that do not celebrate the holiday?
 - b. What are the elements (religious and non-religious, crafts, foods, games and entertainment) of the celebration?
 - c. Where and when does the celebration take place?
 - d. How is knowledge and understanding of the celebration passed on in the family? In the community? How involved are parents, community, and religious organizations in passing on traditions such as the New Year's celebration? (Betty Belanus, SI Office of Folklife Programs, contributed to this activity.)

3. Class visit to a Buddhist temple.

4. Class or school organize a Southeast Asian New Year's celebration.

5. Food Preparation and Carving. Prepare a special Southeast Asian dish such as the following Laos recipe for Chicken Lap (Lap Kai), by Amorn Ker, or carve carrot flowers, instructions below by Nit Malikul.

Chicken Lap

1 lb. skinned boneless chicken, diced
1/2 lb. chicken livers (opt.), diced
1/2 lb. chicken gizzards (opt.), diced
3 cloves garlic, sliced
2 tbsp. chopped red onion
4 tsp. anchovy sauce (if omit, use more fish sauce or salt to taste)
2 tsp. fish sauce
2 tsp. ground dried red chilies
2 tbsp. dried galanga, finely chopped after soaking in hot water for one hour
4 tbsp. lime juice
1/2 tsp. salt
2 tbsp. brown rice powder

For garnish:

4 tbsp. chopped scallion
2 c. mint leaves
1/2 c. coriander leaves

Brown chicken without oil for 2-3 minutes. In a separate pan, brown chicken livers and gizzards until cooked. Place the cooked chicken in a bowl and allow to cool for 5 minutes. Season meat with remainder of ingredients and mix well. Add brown rice and garnish. This dish goes well with lettuce, green beans, cucumbers, and radishes. Makes two to four servings.

Carrot Flowers

Needed: One large straight carrot
One medium straight carrot
One paring knife
One curved knife

Steps:

1. Peel carrots; cut off about 3" from the stem end of the medium sized carrot.
2. Carve around the cut edge of the carrot to make it slightly tapered and round.
3. Across the cut end, cut small wedges about 1/8 inch apart at right angles to each other.

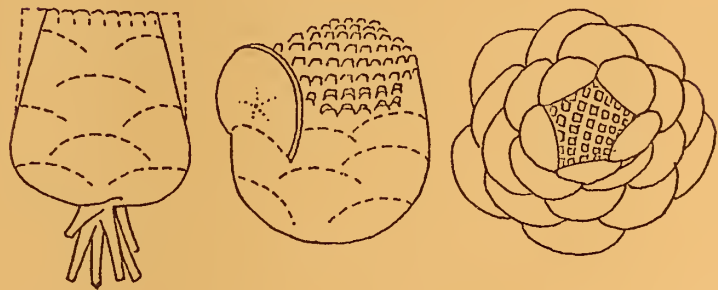
4. From the other side, the thick end of the medium carrot and the largest end of the large carrot, cut five sets of five of five thin slices each (a total of 25) for petals of graded sizes in uniform thickness and arrange them in proper order.

5. Using the curved knife and starting from the top (as shown in the sketch), cut the carrot in 5 half-moon cuts (not straight) for each of five rows, alternating the positions with each row. This will give you a total of 25 cuts in all.

6. The five cuts in each row must be evenly spaced and must be as near to each other as possible so as not to show the bare stem when the petals are arranged in rows.

7. As each row of cuts is completed, the petals must be inserted (by using the knife to open the cut) before making the next row of cuts.

8. After all the layers have been arranged, immerse the flower in water for about 10 minutes. During that time, all the petals will take on their natural curved shape.



Further Reading:

Dommen, Arthur J. *Laos: Keystone of Indochina*. Westview Press, 1985

Luangpraseuth, Khamchong. *Lao Culturally Speaking*. San Diego State University, 1987

LeBar, Frank M. *Laos: Its People, Its Society, Its Culture*.

Wells, Kenneth E. *Thai Buddhism: Its Rites and Activities*. 1960.

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ANOTHER MAASAI STORY

[Editor's Note: Naomi Kipury, a Ph.D. candidate in anthropology at Temple University, is a Maasai woman. The unique perspective of anthropology is a holistic and cross-cultural view, and a central "rite-of-passage" for anthropology students is immersion in another culture through fieldwork. This experience gives a more detached perspective on one's own and other cultures. How is this experience defined for the anthropologist of non-Western origin? Has such a person already gained a perspective on cultural differences through exposure to non-Western and Western cultures? Why is it important to encourage students of different backgrounds to enter this discipline? In this article, Ms. Kipury, currently a pre-doctoral Fellow at the Smithsonian Institution, presents her unique views relevant to these issues. (ASB)]

I was born and raised in a village known as Ilbisil (Anglicized as Bissel), located in Kajiado district in Kenya, one of the two Maasai districts. Ilbisil was and still is such a small place that everyone knows everyone else and social relations are very personal. Because of this, I grew up not always quite knowing who was and who was not a relative. Although Ilbisil is the meeting place of two major Maasai groups called iloshon (sections), Ilmatapato and Ilpurko, the separation was not always clear. My inability to identify my relatives was made even more difficult by the fact that my parents belong to these separate iloshon, in effect making everyone a relative to some degree or other.

As I grew older and learned to distinguish the various kinship categories, the many "relations" began to fall into place. In our little town, other social relationships also included Ethiopian, Somali, and Asian families who had been trading in the area for many years and who seemed to be part of the community. Cultural heterogeneity was an integral part of my experience growing up.

Although Ilbisil is a small village, it is not isolated from national and international affairs. Tanzania's border lies only 30 miles away, and the highway connecting the capital cities of Kenya and Tanzania runs between our home and the school, which was opened in 1951 by the colonial governor. Less than twenty

miles away sits the police headquarters and the government administration and less than 200 yards from our home stands the village church, with its strong stone walls, symbolizing the religious persuasion into which the Maasai were inducted. The church was allegedly built single-handedly by an Anglican priest who was determined, like others before him, to wipe out "paganism" among the Maasai. But judging from records of church attendance and villagers' comments, the physical strength and architectural tastes of the priest/builder more impressed our people than the spiritual message he tried to convey.

Early Education

When I was about 6, I attended Ilbisil primary, the only school in the area. The idea of going to school was extremely exciting to me, mainly because my elder sister was already



"ACTUALLY, HIS SERMONS STINK... BUT HE'S SURE HANDY WITH TOOLS."

attending as were other "big" girls, but also because it was an adventure, something out of the ordinary. In those days [the late 1950's], the colonial government forced children to attend school through the establishment of a quota system. Each district and location supplied a given number of children to the newly constructed government school. It was the responsibility of the newly appointed chiefs and headmen to locate prospective students to fill the quotas. Teachers were equally as difficult to induct into this new educational process. Only a very good excuse would relieve them of this wage employment. As can be expected, there was always a severe shortage of teachers.

In filling the student quota, chiefs and headmen ensured that their own children and those of their friends and clansmen were not selected. This gave special relevance to clans, sub-clans, and any other indigenous social divisions as people attempted to evade the new system. Animosity suddenly shrouded our own little community following the establishment of the school house. My story was different, however. Since my father already had been coerced into attending school, he was determined to send his children as well. Thus, unlike our friends, who were able to stay away from school, we could never dream of doing so. Actually, I was absolutely elated at the opportunity to attend school and could not understand why my grandmother cried and why the majority in my community considered school such a dreaded place. I was yet to be inducted into the horrors of the school experience.

At the age of about 7, I travelled by car to the first all-girl's school in the district at Kajiado, the administrative headquarters. The headmistress was a dedicated and talented South African missionary who spoke our language so well that she even composed songs in Maa. She was affectionately nicknamed "mother of girls." Despite what seemed like fine living conditions, boarding school was a miserable experience to most of us and entirely different from anything we were accustomed to.

The food, for instance, consisting of vegetables, maize, beans, and ugali (made from maize meal), was strange to most of us. Only two or three of us had ever tasted any

vegetables. Cabbage and carrots, over-boiled in the typically English style, were quite unpalatable. As essentially cattle pastoralists, the Maasai primarily subsist on milk and on occasion meat. We are popularly known to exist on blood, however, consumption of it occurs only during very hard times or during convalescence. Since we all were from a pastoral community, where milk was our only food, lack of it was interpreted by us and by our folk as either starvation or malnutrition, and, at times, as both. Once during a drought, boiled maize was our only sustenance, and since most of us did not eat it, we often went hungry.

School was further made difficult by rules we thought unnecessarily strict. For instance, two girls were not allowed to sleep in the same bed, yet for most of us, sleeping in one's own bed was a new experience. We found sleeping alone cold and scary, and so most of us often broke the rules to sleep with friends. Picking berries near the school during the weekends was also not allowed. For these reasons, and because we were homesick, we held crying sessions every evening during the first weeks of school. Cultural differences made home more interesting than school, and so, many girls ran away with hopes they would not be recaptured, as often happened.

On Becoming an Anthropologist

I was one of the four of the original 80 girls at the school who went on to high school in Kajiado, and, later, to the University of Nairobi. I survived the drop-out rate because I felt I was too far entrenched to quit, so I continued. I am certainly glad to be literate, unlike my mother who never got the chance. Not all that we learned in school, however, was relevant to my education, just as not all that our community had to offer was irrelevant. After years in the "culture" of boarding school, away from my family and community, I felt somewhat alienated from my own culture and sure that I had missed out on a great deal of valuable knowledge. Perhaps my decision to become an anthropologist was partly influenced by my desire to investigate my own society. I found I had a particular interest in social change, the transformations that have been taking place at different levels of society, and how people have reacted to them. These became the focus of my interests in graduate school. In particular, I am examining the complexities

of class and gender during the transition from pre-colonial times to the present.

Culture Change Among the Maasai

A discussion of change among the Maasai might sound like a contradiction in terms, since we are often perceived as conservative and impervious to change. In earlier anthropological literature we would have epitomized the concept of the "noble savage." However, the Maasai, like everyone else, have experienced an incredible amount of change that has affected every aspect of their lives. Change as we know it is part and parcel of human survival.

The most pronounced changes to have taken place over the past twenty years are economic, political, and social. The early encounters with colonialism have led to expropriation of land through treaties similar to those signed with the American Indians. In subsequent years, commercialization of land and livestock have led to further economic constraints.

Politically, the Maasai like other small Third World societies have been incorporated into modern states and the world system, whose ideology is radically different from their own. How do we gauge the effect of these transformations within the family level? Although all of these processes have been deeply felt by all levels of society and by all categories of people, the manner in which women have been affected has not been adequately covered in the anthropological literature, partly because of the andro-centric biases of earlier studies. I hope my study and those of others, who are now addressing this issue, will bridge that gap by focusing on women within the total system in which they operate both historically and culturally.

As members of a pastoral society, women "traditionally" had significant control over the herds and the household economy. While men may have controlled the exchange of livestock mainly for the elaboration of affinal and other ties, women controlled the products of the stock and were primarily responsible for feeding the household. At marriage a woman received a certain portion of the household herd, which remained under her jurisdiction throughout the marriage. A portion of this stock she allotted for her son's inheritance. As managers of the production and distribution of the milk and

staple products, women played an important role in ensuring the productivity of the herds for sustenance and for future redistribution. Only through negotiation could any livestock under their jurisdiction be disposed of, loaned out, or sold.

Since colonialism, our pastoral economy and consumption primarily of dairy products, and hence women's economic role, within the household and community, have been undermined by changes that have significantly affected relations between people and among people, their land and their animals. The commercialization of agriculture, for instance, has led to environmental over-use from the reduction and degradation of our rangelands, necessitating the herding of stock to more widely dispersed areas in search of water and grass. While the mobility of herders has increased, the mobility of women with children attending primary day school has been restricted, so that they are often separated both from the men and from the herds which usually provide their sustenance.

The commercialization of livestock has led to a shift in the focus of pastoral production, from milk to meat products. Since meat production requires the calves to be kept with the mother for a longer period, the availability of milk for family consumption or exchange is reduced. Not only does this reduce women's economic importance, so have the more recent development policies that have tended to create a new role for the male "head-of-household" as property-owner and tax-payer. This new system does not accommodate the shared "ownership" of livestock within the household or the differential control of livestock products. The denial of women's traditional residual rights in the cattle of marriage-exchange and sons' inheritance has reduced their productive role still further, and has fostered economic dependence. Increasingly, women are finding it difficult to feed their households, and, men, often separated from wives and children, are similarly unable to devote adequate means to household sustenance, partly because of economic constraints but also because they lack the cultural training as providers of the daily food.

(continued on p.13)

SUMMER FIELDWORK OPPORTUNITIES

Are you looking for adventure, discovery, and learning this summer? Become a member of an archeological excavation team, a scientific expedition, or a field program in the United States or abroad. With a little research you might be surprised at the opportunities available to you even within your own community. As teachers you can share your findings with your students. Many programs take young people 16 years of age or older.

Anthropology departments of local universities and colleges, state historic preservation offices, and state archeological societies often engage in local archeological excavations and frequently accept volunteers with no previous fieldwork experience. The Archaeological Institute of America (AIA) offers a listing of state archeologists associated with the national organization as part of its yearly field school listing for the U.S. and abroad (\$6.00 for members, \$8.00 for non-members). Write: AIA, 675 Commonwealth Ave., Boston, MA 02215, or call 617-353-9361. Archaeology magazine, published by the AIA, features an archeology travel guide to sites open to the public in the Old World (March/April issue) and the New World (May/June issue). A field school listing is also available from the American Anthropological Association for \$4.50 for members and \$6.00 for non-members. Write: AAA, 1703 New Hampshire Ave., N.W., Washington, D.C. 20009 or call (202) 232-8800.

For a comprehensive listing of fieldwork opportunities in the Washington, D.C. metropolitan area, the Smithsonian Institution's Department of Anthropology distributes A Guide to Resources on Local Archeology and Indian History. For a copy of this free guide, write: Public Information Office, Department of Anthropology, Smithsonian Institution, Washington, D.C. 20560; or call (202) 357-1592.

There are several organizations that offer volunteer public participation in worldwide research expeditions in various scientific disciplines. Many of these organizations, listed below, are non-profit and donations can be treated as tax-deductible contributions.

University Research Expeditions Program
University of California, Desk K-15,
Berkeley, CA 94720
(415) 642-6586.

Earthwatch
680 Mount Auburn St., Box 403, Watertown, MA 02172. (617) 926-8200
(Earthwatch has a special scholarship program for teachers)

International Research Expeditions
140 University Dr.
Menlo Park, CA 94024
(415) 323-4228

Foundation for Field Research
787 South Grade Rd.
Alpine, CA 92001-0380
(619) 445-9264

CEDAM International
(CEDAM stands for Conservation, Education, Diving, Archeology, Museums)
Fox Road, Croton-on-Hudson, NY 10520
(914) 271-5365

Below is a selected list of organizations that offer fieldwork experience in the United States and abroad:



Crow Canyon Archaeological Center is a non-profit institution specializing in Southwestern archeological research and education. The following programs introduce participants to archeological field methods, laboratory techniques, and excavation. The Adult Research Seminars, consisting of week long sessions, are conducted from May 28 to October 14. The High School Field School takes place from June 18 to July 15; applications should be mailed in ASAP. The Teachers' Workshop, conducted from July 23 to July 29, offers recertification credit. Write or call: Crow Canyon Archaeological Center, 23390 County Road K, Cortez, CO 81321; (800) 422-8975.

Flowerdew Hundred Foundation offers a summer institute for college and university educators in The Historical Archaeology of European Expansion 1550-1700, from June 25 to July 30. Participants will examine the similarities and differences of the English, Spanish, and French colonial endeavors in the eastern U. S. and the Dutch in South Africa. James Deetz and Ivor Noel Hume are among the distinguished faculty. Stipends will be awarded. Early application is suggested. Write or call: Flowerdew Hundred Foundation, 1617 Flowerdew Hundred Rd., Hopewell, VA 23860; (804) 541-8897/8938.

Human Origins and Prehistory in Kenya: The Koobi Fora Field School, offered by Harvard University Summer School and the National Museums of Kenya, introduces the wealth of paleoanthropological evidence at Koobi Fora and field methods in early man research. The field school consists of two six-week training sessions (June 8-July 19 and July 26-September 5). Write: Dr. Harry V. Merrick, Koobi Fora Field School, Harvard Summer School, 20 Garden St., Cambridge, MA 02138, or call (203) 481-0674. Note: A three-week seminar for teachers in 1990 at Koobi Fora to consist of lectures, demonstrations, and site visits is under consideration. If interested, write to Dr. Merrick at the above address.

Cahokia Mounds Field School, sponsored by Southern Illinois University, will concentrate this season on excavating the central plaza. The first session, June 19-30, is for college credit only; the second, July 10-21, is for non-credit and anyone age 16 or over may apply. For more information, write or call George Holley, Ph.D., Contract Archeology Program, Box 1451, South-

ern Illinois University, Edwardsville, IL 62026; (618) 692-2059.

Parsons School of Design offers two anthropology-related programs this summer for students and teachers. Paleolithic Art and Archaeology of the Dordogne, a two week course (July 29 to August 14), involves visits to about twenty decorated caves and five Paleolithic living sites under archaeological investigation. Parsons in West Africa offers programs in the Ivory Coast (July 8 to August 2) and Mali (August 5 to August 26). In the Ivory Coast explore the traditions in ceramics, fiber arts and metal-smithing, or the history of traditional African art and architecture through visits to traditional villages. In Mali learn about the great trading centers and medieval empires. Write or call: Parsons School of Design, Office of Special Programs, 66 Fifth Avenue, New York, NY 10011; (212) 741-8975. Early application is advised.

Center for American Archeology, Kampsville Archeological Center conducts educational research programs for junior and senior high school students, college students and the non-professional, and separate workshops for teachers. Write: Admissions Office, Kampsville Archeological Center, Kampsville, IL 62053, or call (618) 653-4395.

Northwestern University's Ethnographic Field School (June 19-August 2) offers students of all disciplines an opportunity to experience another culture. Students design their own independent research project to learn about the Navajo or Hispanic cultures in New Mexico and Arizona. Write or call Professor Oswald Werner, Department of Anthropology, Northwestern University, Evanston, IL 60201; (312) 491-5402 or (312) 328-4012 evenings.

Science Museums of Charlotte, Inc. sponsors Field Archaeology in San Salvador, Bahamas. National Geographic concludes, from excavations by Dr. Charles Hoffman (Northern Arizona University), director of this program, that Samana Cay, not San Salvador, is where Columbus first landed. Join in the excavation of a Lucayan Indian site dating to the time of Columbus that last year yielded Indian and European artifacts. Three field sessions: (June 2-13, June 12-24, and July 2 to July 18). Registration deadline is April 30. Write or

call: Jerry Reynolds, Discovery Place, 301 North Tryon St., Charlotte, NC 28202; (704) 372-6261.

Smithsonian Research Expeditions offers qualified individuals, 18 years or older, an opportunity to work for two weeks alongside Smithsonian researchers in various scientific areas including archeology and anthropology. Describe and photograph the Crow Fair (August 15-22) in Billings, Montana in the expedition The Legacy of the Horse in Crow Culture. Write or call: Smithsonian Associate Research Expedition Program, 3945 Quad, Washington, DC 20560; (202) 357-1350.

Smithsonian National Associates Travel Program offers travel opportunities around the world; several anthropology-related programs are: Pueblo Indians of the Rio Grande Valley (July 9-16); Southwest Indians (May 4-14 and August 24-September 3); Sojourn in Tucson (April 1-8 and 15-22); Black Hills and Crow Fair (August 16-25); and Kentucky/Appalachia (September 16-23). Write or call: Smithsonian National Associates Travel Program, 3045 Quad, Washington, DC 20560; (202) 357-4700.

Archaeological Rescue Inc., an affiliate of the Anthropology and Education Sections, Milwaukee Public Museum, is conducting summer field schools at Sheboygan Marsh in Sheboygan County, Wisconsin where evidence of human occupation dates back to 8000 B.C. Weekly and daily sessions are scheduled for educators, students, families, and adults. No experience is necessary. For more information, call (414) 352-2515.

Southwestern Archaeology Workshop for Teachers (June 6 to July 6), sponsored by the Anthropology Department, Northern Arizona University, is an introductory course for teachers. Includes excavation at Elden Pueblo (an 11th - 13th century Sinagua site near Flagstaff) and trips to various archeological sites. In addition, the Elden Pueblo Project sponsors several public programs such as week-long day camps for 4th to 6th graders and 7th to 9th graders, Arizona Archaeological Society (amateurs) certification programs, and the Family Camp Excavation Program. For more information on the teacher workshop and on the various public programs, write or call Dr. Carl Phagan, Anthropology Department, Box 15200, Northern Arizona University, Flagstaff, AZ 86011; (602) 523-3180/7431/3038.

("Maasai," continued from p.10)

I do not believe that my society is unique nor are the changes Maasai women are experiencing. Therefore, I hope that my study will be a contribution to scientific discourse and to the manner in which peoples like my own are adapting to economic, political, and social changes. Anthropology is sometimes considered a Western system of thought that grew out of imperialism, but I do not believe that it should be condemned to stay so. If anything, the discipline should be able to provide tools with which to conceptualize culture change in transitional societies. To be able to do this, and for the sake of its own survival, the discipline has had to adapt. The contribution of Third World students could certainly enrich the discipline even further.

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("Egypt," continued from p.4)

1980)? Or, did Egyptian influence and, eventually, their rule travel south, along with their carved and painted objects (Adams 1985)?

On the basis of the archaeological evidence from the Egyptian predynastic period, no case can be made for large-scale invasion from the Near East. Even the evidence for direct contact could also be interpreted as indirect trade through intermediaries in the Delta. The main elements of the Egyptian state appear to have developed locally and to have involved extensive contact with other African peoples.

"White" or "Black"

The physical appearance of the ancient Egyptians is based on two types of evidence: 1) indirect evidence from Egyptian art and contemporary accounts of ancient Greek or Roman authors, and 2) direct evidence from skeletal remains and mummies. The indirect evidence, summarized by the Senegalese scholar Cheik Anta Diop (1974), suggests that ancient Egyptians were darker-skinned (often depicting themselves in dark red) than Europeans, and that some of them had projecting lower faces, thick lips, broad noses, and woolly hair often styled in ways still in use south of the Sahara. Diop's examination of a mummy revealed a considerable degree of melanin, within the range of peoples considered "Black" today, particularly those living in and on the edges of the Sahara. Other mummies examined have shown a range of hair-colors and textures--blond to dark brown and straight to woolly.

Most of the direct evidence, however, is in the form of skeletal remains, particularly those from predynastic times. While some authors point to alveolar prognathism (projecting lower face), short broad faces, long narrow skulls, broad nasal apertures, and long gracile limbs as "Negroid" characteristics, most physical anthropologists agree that there are no skeletal characteristics that unequivocally diagnose "Negroid" ancestry. One author

argued that if the above characteristics were applied to ancient English skeletons, a third of them would be designated as "Negroid." A further factor underlying the lack of diagnostic skeletal features is the difficulty in assigning living individuals to one and only one "race," particularly in the very area we are discussing. While people differ in appearance around the globe as a result of historic migrations and adaptation to prevailing climates, the very mobility of humans from their remotest beginnings and their propensity to intermarry has resulted in considerable overlap in characteristics between even distant populations, to say nothing of adjoining ones. There is no line on the map where everybody on one side belongs to a relatively homogenous "Black" race, and everyone on the other to a homogenous "White" group. In living peoples, such designations are often underlaid by cultural or ethnic identity rather than physical characteristics.

Another factor that has confused the issue in the past is the evolution of the human face, which has taken place since the invention of agriculture. With less stress on the chewing muscles, teeth are smaller, lower faces smaller and less projecting, and brow ridges and muscle attachments less prominent. Since many contemporary Europeans have relatively large brow ridges and faces, ancient skeletal populations of Africa were considered "White" ancestors, and modern east Africans were seen as recent immigrants from a very restricted area of west Africa. G. P. Rightmire (in Clark and Brandt 1984) and L. Schepartz (1987 Ph.D thesis) have demonstrated conclusively that the east African populations of the final ice age shared most anatomical features with such modern East African groups as the Maasai, Turkana, Nuer and other tall linear peoples.

A study by G. Armelagos and others (in Clark and Brandt, 1984) asks a more interesting question. Were the people who lived in Nubia during predynastic and dynastic Egyptian times different from the people who live there now? Based on a comparison of different Nubian populations through time, the authors conclude that the apparent "intrusion" of individuals with smaller, less projecting faces and brows, and more gracile skeletons is due to a

combination of reduced chewing stress and greater nutritional stress. The latter resulted from a lack of some important human nutrients, particularly iron, in the diets of early agriculturalists and led to dietary deficiency diseases such as anemias. In addition, through examining features such as dental cusp patterns, which more truly reflect genetic inheritance and are little affected by diet or chewing stress, Armelagos and others have shown that the ancient Nubians were the ancestors of the modern Nubians. A similar conclusion applies to the skeletal remains from Upper Egypt (Greene 1972). Although movement up and down the Nile created a varied population, the intensity of this movement was not greater in the past, nor did it overwhelm the genetic "signature" of the indigenous Nile Valley peoples. The ancient Egyptians, who varied considerably in appearance both within single cemeteries and over the long reach of their civilization, did not resemble the Senegalese or Ghanaians as much as they resemble their own descendants particularly in their heartland south of Cairo in Upper Egypt.

Ancient Egyptians were then neither "Black" nor "White" but highly varied from north to south and physically intermediate between the geographically adjacent peoples of the Near East and their sub-Saharan neighbors to the south. As Africans, they were certainly in contact with emerging states to the east, first adopting from them some of their domesticates and later other inventions such as bronze metallurgy. But the basic achievements of ancient Egypt--the initial domestication of cattle and barley; the manufacture of fine pottery, jewelry and precious stone vessels; the special emphasis on mortuary rituals; and the invention of hieroglyphic writing--developed from African roots. If Williams is correct, even pharaonic kingship may have originated in Nubia and spread north, rather than the reverse.

Alison S. Brooks

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Anthro Notes

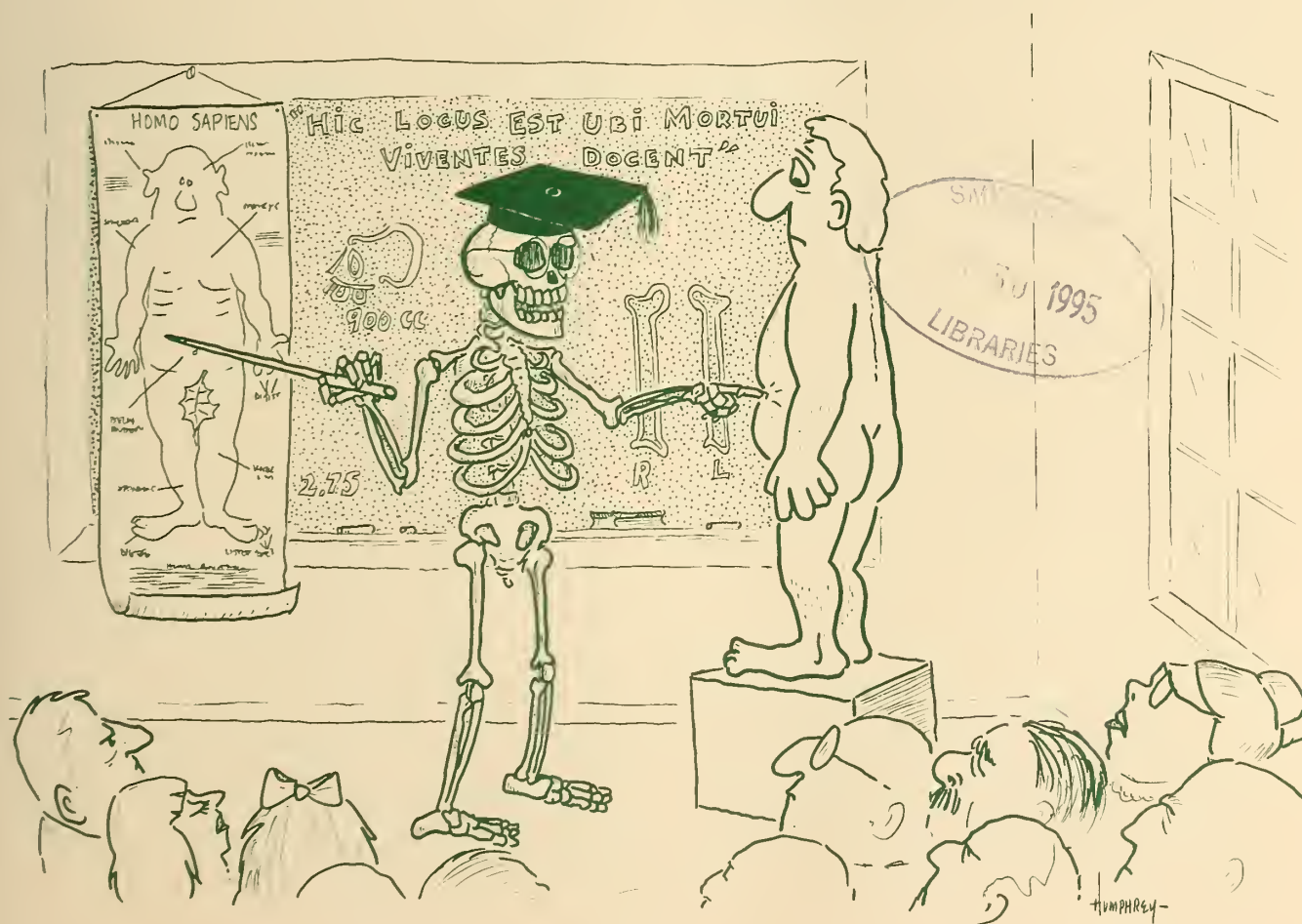
National Museum of Natural History Newsletter for Teachers

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WHAT BONES TEACH US

Collecting and studying human skeletons in museums and scientific laboratories is presently a complex, controversial subject. The purpose of this article is to explore the kinds of information scientists obtain by studying human skeletons, and how that information is used.

A physical anthropologist is trained to determine many facts about an individual from bones alone. For instance, sex identification often can be determined by the differences in the pelvis and skull. Even bone fragments may be sexed; some chemical components of bone differ between men and women. Age at the time of death can be estimated very closely by



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looking at the teeth and at the fusion between different parts of the same bone, especially for children and young adults. For older people, the estimates are less exact and rely more on changes in joint surfaces, fusion between skull bones, and microscopic details of internal bone structure. Height is estimated by the length of the long bones, especially the thigh. Race can often be determined by looking at characteristics of the facial skeleton. Statistical studies of tooth, skull and face shape can even distinguish closely related groups within the same major race.

The skeleton reveals information about lifestyle as well. Well-developed muscles leave their mark on bone and tell of heavy physical activity during life. Habits (such as pipe-smoking) and handedness may leave traces on teeth or in asymmetric bone and muscle development. Health, injuries, and many diseases, such as syphilis, tuberculosis, arthritis, and leprosy, may leave traces on bone. A subfield of physical anthropology, paleopathology, is devoted to the study and diagnosis of diseases in ancient human remains.

From these studies, paleopathologists are often able to provide medical insights on the history and ecology of modern human diseases. For instance, childhood illness or malnutrition can be detected by abnormalities in tooth enamel and bone mineralization. By noting the position of these abnormalities, physical anthropologists, with their knowledge of normal growth patterns of bones and teeth, can often pinpoint at exactly what age the illness or growth disturbances occurred. From this can be determined whether a child's health problems were caused by a sick or poorly nourished mother, by early weaning, or by later periods of food shortage.

Victim Identification

Because of their skill at piecing together an individual's life history from skeletal clues, physical anthropologists are constantly in demand to help identify humans who have been the victims of accidents or foul play. The forensic anthropologist can tell authorities if bones

are human, and if disarticulated, whether or not they all come from the same individual. Today, physical anthropologists are helping Argentinean authorities locate and identify skeletons of people kidnaped and murdered by political extremists during Argentina's period of upheaval in the past decade. Recently, anthropologists helped confirm the identification of a skeleton attributed to Nazi war criminal Josef Mengele. Other scientists use information learned from studying museum skeletons to help provide facial reconstructions of what missing children might look like several years after their disappearance.

Burial Remains

Why do scientists collect and study more than one skeleton from the same site or cemetery? Isn't one enough? The answer depends on what questions the scientist wants to answer. Although a single skeleton can tell us much about an individual, that person is known only in isolation, and people don't live in isolation. To the anthropologist, much more important information about whole social groups, their history and relationships with neighboring and past cultures, their diet and health, and also their social customs and relationships can be obtained only by studying large numbers of skeletons from the same culture or living site. Such population-wide studies require many specialized analytic techniques that depend on having large numbers of observations in order to be valid.

The Case of the Ainu

Many of these population studies have provided information about past human migrations, declines, and relationships that were unrecorded even in traditional stories and myths. For instance, research by anthropologists on the Ainu of Japan has resolved some long-standing questions about their origins. The Ainu are considered by most Japanese to be a low status ethnic minority whose physical features are somewhat different from the majority population. Although Japanese tradition holds that modern Japanese are descended from the prehistoric Jomon culture found throughout Japan, two studies now show that the Ainu are the true descendants of

the Jomon people. According to studies of minute variations in teeth and skulls of the modern inhabitants of Japan, and of various prehistoric cultures from Japan and other parts of Asia, the modern Japanese are most likely the descendants of invaders from northern China called the Yayoi, who conquered the islands a little over 2,000 years ago. An interesting twist to the story is that many of the medieval Japanese warrior class, the samurai, show physical features that suggest that they were descendants of Jomon mercenary armies recruited by the Yayoi during their military conquest. As the samurai gained power and status, they eventually intermarried with the Yayoi ruling classes and passed on some of their typically "Ainu" facial traits into the modern upper classes of Japan. Today's Ainu are the descendants of unabsorbed Jomon populations who were pushed into increasingly marginal areas by the Yayoi-Japanese and their Jomon-derived samurai.

Similar kinds of studies have been used to provide answers to questions as diverse as how many waves of prehistoric immigrants populated Australia, how much white admixture there is in various Amerindian groups, and how much intermarrying there was between Pueblo groups in the Southwest and Europeans during the contact period. Other researchers using the same techniques have been able to chart the progressive distinctiveness of Amerindian groups from other Asians and Pacific island populations to estimate when Amerindian migrants first entered the Western Hemisphere and when the various tribes became separate.

Mohenjodaro Revisited

Scientists utilizing new techniques have even been helpful in resolving questions about classical civilizations. The city of Mohenjodaro, the center of Harappan civilization in the Indus Valley, was thought to have been sacked by Aryan warriors invading in 1500 BC. After studying the human remains from Mohenjodaro, anthropologists have now concluded that no massacre ever occurred because they found no battle injuries on the bones. They also found no evidence of genetic differences between populations before, during, and

after the decline of Mohenjodaro, which makes an invasion of foreigners very unlikely. However, the skeletons did show high levels of disease and parasites, which might have been a more important cause of the Harappan decline than any invasion or conquest.

Disease, Diet, and Demography

Studies of cemeteries show scientists how human groups interact with their environment, and how they in turn are affected by changes in the physical world they occupy. Reconstructions of demography, diet, and growth and disease patterns help physical anthropologists understand the ecology of prehistoric groups and make some surprising discoveries about human adaptations, such as the health costs of agriculture, and the origins of some modern human diseases.

Many diseases can be diagnosed from skeletons, and it is sometimes possible to recover fossilized bacteria, and occasionally, amino acids for blood typing directly from bone. One extensive study of Grecian cemeteries from ancient to modern times traced the increase in malaria-resistant anemia (thalassemia, similar to sickle-cell anemia in Africa) in Grecian populations, and showed the effects of changes in ecology and social and economic patterns on the health and lifespan of ancient and recent Greeks. By looking at groupings of skeletons in cemeteries, the scientist was also able to reconstruct families or clans, and to show that anemic groups were more fertile than others.

Studies of skeletons can also tell what people ate, even without having any cultural information. Some techniques measure certain chemical isotopes and trace elements in ground bone. These amounts will differ, depending on the proportion of meat to vegetables in the diet, and on the type of plant foods eaten. Results have shown that in some prehistoric groups men and women had different diets, with men sometimes consuming more meat and women eating more plant foods. Other studies have shown that different diets leave different microscopic scratch patterns on tooth

surfaces, and several kinds of prehistoric diets can be distinguished in this way.

Changes in diet often cause changes in health, which can be seen in the skeleton. The shift to maize in the prehistoric Southwest coincided with an increase in porous bone in skeletons, a sign of iron deficiency anemia. In maize farmers from Dickson Mounds, Illinois, defects in tooth enamel, which are caused by stress during childhood, are more numerous. Infant mortality was also higher, and adult age at death lower than in pre-agricultural groups. Similar studies of Hopewell mounds concluded that the agricultural Hopewell had more chronic health problems, dietary deficiencies, and tuberculosis than pre-agricultural groups. Agriculture is usually thought to bring an improvement in quality of life, but the surprising conclusion that prehistoric agriculture marked a decline in general health in the New World has been confirmed by many other studies.

Recent Population Studies

Studies of human skeletons can be useful even for recent populations, when written records are limited or have been lost. Several studies have reconstructed the living conditions of African-Americans both during and after the end of slavery. Skeletons recovered from an 18th century New Orleans cemetery showed many differences in nutrition and physical stress between urban and rural slaves. Skeletons from a late 19th-early 20th century cemetery in Arkansas open a window on this period, which is not well documented by other historical sources. Researchers concluded that men commonly left the community (there were few male burials), and that some of the community intermarried with the local Indian population. On the whole, the population was poorly nourished and had low resistance to disease. Many infants died at birth of widespread bacterial infections. Childrens' skeletons show dietary deficiencies and chronic infections, with many dying at 18 months, the weaning age. Iron deficiency anemias were common, probably due to corn-based diets; high levels of arthritis indicate heavy physical labor; and many signs of injuries on male skeletons may be evidence of high levels of interpersonal

violence. Even without written records, the skeletons in this Post-Reconstruction community tell us of continual malnutrition, poor health, and levels of physical stress, which even exceeded those found in some communities during slavery.

Ancient Diseases in Contemporary Populations

Physical anthropologists find many contemporary diseases in earlier human populations. Some show peculiar distributions in the United States today, which can sometimes be tied to disease prevalence in the past. One of these is osteoporosis, a weakening of bone due to a calcium-poor diet and low bone mass resulting from low exercise levels during life. This condition afflicts primarily elderly white females, leading to spontaneous fractures and spinal deformities. Surprisingly, anthropologists have discovered that osteoporosis is common in living and prehistoric Eskimos of both sexes, and appears at an earlier age when compared to American whites. However, fractures and spinal problems have not been common in Eskimo populations. In spite of the traditional calcium-poor Eskimo diet, vigorous exercise results in heavier bones that protect the individual in old age. Now however, increased lifespan and alterations in lifestyle may contribute to a rise in osteoporotic bone disorders in Arctic populations in the future.

Evidence of a disease in prehistory is sometimes useful in understanding its cause. Osteoarthritis is often found in prehistoric skeletons. Changes in the locations and numbers of joints affected, and in the proportions of men and women afflicted, have suggested that systemic factors affecting only one sex may be involved in the severity of modern arthritis, an insight that may help focus further research efforts. Studies of prehistoric skeletons have shown that high levels of tooth decay are typical only of agricultural populations. This has led to the observation that sticky carbohydrates common to most agricultural diets have something to do with the epidemic of tooth decay modern populations are experiencing. But mineral deficiencies

(continued on p.14)

HAPPY BIRTHDAY!

Our new look signals a rite of passage: *Anthro.Notes* is ten years old this spring! As anthropologists we celebrate an important milestone; as teachers we want to tell our story to those who were not with us at the beginning.

In The Beginning

The cartoon below, drawn in 1978, marks our mythical moment of birth. That spring four anthropologists, two affiliated with the Smithsonian Institution (Ruth Selig and Ann Kaupp) and two with George Washington University (GWU) (Alison S. Brooks and JoAnne Lanouette), created a new kind of museum/university teacher training program under the auspices of the National Science Foundation: The Smithsonian Institution/George Washington University Anthropology for Teachers Program. The cartoon, drawn by GWU anthropologist/ artist Robert L. Humphrey, served as program logo. The 1979 reviewers at the National Science Foundation encouraged us to continue the program but suggested we create a continuing link with our graduates. We thought the idea a splendid one and responded with a program newsletter. We called it *Anthro.Notes*! (See pp. 8-9 for ten years of *Anthro.Notes* cartoons.)

That first issue, vol. 1, no. 1, (spring 1979), was six pages long. It focussed on news for the 50 teachers in our year-long teacher training program as well as for the 25 graduates from the 1978-79 program. It

described the program, reviewed basic teaching resources, and announced upcoming events. Three hundred Washington area teachers received the spring 1979 issue.

Early Years

In the fall of 1979 we received a telephone call from the producers of the PBS Odyssey film series: would the *Anthro.Notes* team write an "Educator's Guide to Odyssey"--in one month's time! We spent our Christmas vacation writing furiously, and the extra materials we wrote --too much for the completed *Guide*--we published in *Anthro.Notes*. In April 1980, we received a call from a Council on Anthropology and Education board member asking us to organize a symposium on teacher training programs for the 1980 American Anthropological Association meetings in Washington, D.C. We did, invited our participants to the session, and distributed lots of copies of *Anthro.Notes*.

Meanwhile, the Smithsonian was receiving increasing numbers of letters asking for materials to help teach anthropology in classrooms. Requests for *Anthro.Notes* increased each month (today our mailing list reflects an international readership of 3000, about equally divided among precollege teachers and college and university anthropologists as well as institutional professionals, such as librarians, museum educators, historical society administrators, and state archeologists.) Our newsletter increasingly became a national publication bridging the worlds of education, anthropology, archeology,



Anthropology for Teachers Program

GEORGE WASHINGTON UNIVERSITY/SMITHSONIAN INSTITUTION

museums, and professional societies. To answer the requests for teacher information, we pulled together materials created for our teacher training courses into teachers' packets available from the Smithsonian's Department of Anthropology's Public Information Office. Since *Anthro.Notes* editors and teacher training staff also directed this Public Information Office, the dual efforts dovetailed.

In the summer of 1980, Sol Tax, anthropologist and founding editor of *Current Anthropology*, wrote us a lovely note of congratulations on *Anthro.Notes*, "always good and getting better..." Robert Humphrey "is the best anthropological cartoonist I can recall." We were pleased and encouraged and increasingly serious about our publication and about the importance of anthropology in schools.

By the winter of 1982, *Anthro.Notes* had evolved into its present format of sixteen pages offering lead articles based on solid recent research on topics of interest to teachers; "Teachers' Corner" articles with tested, practical teaching activities; articles reviewing resources for teachers such as summer field opportunities, new curriculum packages, films, or books; and feature articles balancing the subdisciplinary coverage of the newsletter. Each issue cannot cover all subdisciplines, but through the year's three issues, we try to balance the articles among the traditional four fields of anthropology: physical anthropology, archeology, linguistics, and cultural anthropology.

Philosophy

Since 1982, the philosophy of *Anthro.Notes* has continued to reflect the philosophy of our teacher training program, first created with George Washington University (1978-1982) and then with the University of Wyoming (1984-1985). The Anthropology for Teachers Program, both in Washington and in Wyoming, had four major objectives: 1) to give teachers a firm foundation in anthropology; 2) to help teachers integrate the subject into their teaching; 3) to aid teachers in better utilizing their community's resources for the teaching of anthropology; and 4) to create

a network of teachers, anthropologists, and museum educators interested in encouraging more precollegiate anthropology.

Teacher Training Program

To achieve these objectives, the teacher training program was structured with four separate components: a full year, eight graduate credit university course specifically designed for precollege teachers; a museum-based Anthropology Resource Center for Teachers filled with curriculum materials; the newsletter *Anthro.Notes*; and evening lectures by distinguished anthropologists. In Washington, D.C., the course was presented to 75 junior and senior high school teachers in three sections each year, focussing on eight monthly topics relevant to precollege classes such as Human Evolution; Civilizations of the Past; Native Americans; Socialization in Africa; and Language and Culture. Each monthly topic involved an introductory lecture; experiential, practical teaching activities; a seminar session with museum and university scholars; and a workshop at which teachers shared their own curriculum units. The four *Anthro.Notes* editors served as program staff, including Alison Brooks (director), former secondary school teachers JoAnne Lanouette and Ruth Selig (senior teaching staff), and Ann Kaupp (program administrator/newsletter editor).

Anthro.Notes

Mirroring the philosophy of the teacher training program, the newsletter tries to balance the research and applied side of anthropology. Through lead articles we have highlighted "cutting-edge" research on topics relevant to precollege teaching. These articles also have included controversial topics such as in: "Creationism ≠ Science," "PreColumbian Settlers: Fact or Fancy," "Speaking of Apes: Language Experiments and Communication Among our Closest Relatives," "Vinland Revisited: 986-1986," and most recently, "The Roots of Ancient Egypt."

We have shown an equally strong commitment to helping teachers bring anthropology into their classrooms by offering practical teaching strategies,

reviews of new resources, a yearly "summer opportunities" article, and helpful items in our "Do You Know" columns. Some favorite "Teacher's Corners" showed teachers how to teach family folklore, study community festivals, learn about stratigraphic analysis, teach human origins, and introduce anthropology through literature.

Finally, we have tried to draw from a wide range of resources, bringing as many of those resources in Washington, D.C. to teachers and anthropologists across the country. Whether through an article by a visiting Maasai post-doctoral fellow at the Smithsonian; or a review of a new Smithsonian exhibit that will be travelling throughout the country over the next few years; a teachers' corner drawn from a new commercially available archeology curriculum package; or an invitation to attend a conference or join a new task force on precollege anthropology education, we have tried to create a network of professionals who are interested in anthropology, believe in its relevance to their lives and the world around them, and who find it helpful to share research, teaching ideas, and resources among themselves.

It has been a pleasure to serve our readers for the past ten years, and we look forward to another ten years of *Anthro.Notes*!

Ruth O. Selig

* * * * *

PRECOLLEGIATE TASK FORCE

The AAA has established a new national AAA task force on The Teaching of Anthropology in Schools co-chaired by Jane J. White (University of Maryland, Baltimore County) and Patricia J. Higgins (SUNY, Plattsburgh). Further information will appear in the fall issue of *Anthro.Notes*.

MEET THE EDITORS AND THE CARTOONIST

Alison S. Brooks

Alison is Professor of Anthropology at George Washington University and Smithsonian Research Associate. Her research specialties include the palaeo-anthropology of Central and Southern Africa as well as ethno-archaeology based on research with Botswana's San people.

Ann Kaupp

Ann directs the Public Information Office of the Smithsonian's Department of Anthropology, which produces bibliographies and teacher resource packets, in addition to *Anthro. Notes*. Ann is senior editor of *Anthro.Notes* and editor of a Department of Anthropology newsletter, *Anthropolog*.

JoAnne Lanouette

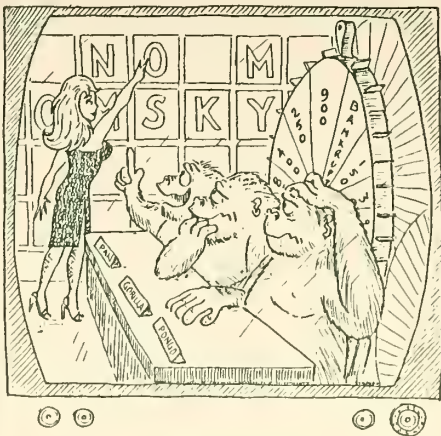
JoAnne teaches English at Sidwell Friends Upper School in Washington, D.C. and integrates anthropology into her senior elective, Individualism and Cultural Pressures. JoAnne has also enjoyed leading students to Japan and China.

Ruth Selig

Ruth serves as Special Assistant to the Smithsonian's Assistant Secretary for Research. She joined the Institution in 1975 to develop a new office of Information and Education for the Department of Anthropology. Ruth helped establish the AAA Task Force on Teaching Anthropology, and co-chairs its Committee Three: Review and Development of Curriculum Materials with Ann Kaupp.

Robert L. Humphrey

Bob is a professor of Anthropology at George Washington University and specializes in Mesoamerican and Paleoindian archaeology and the prehistory of Washington, D.C. An undergraduate major in art history, Bob has cartooned since the 1950's, mostly in the privacy of his own study. He became official *Anthro.Notes* cartoonist in 1979.



... ON TELEVISION (1986)



... ON PERSONALITY (1984)



... ON ART (1988)



... ON THE MUSEUM (1986)

**WORST OF
THE BEST**



HUMPHREY



... ON SHELTER (1986)



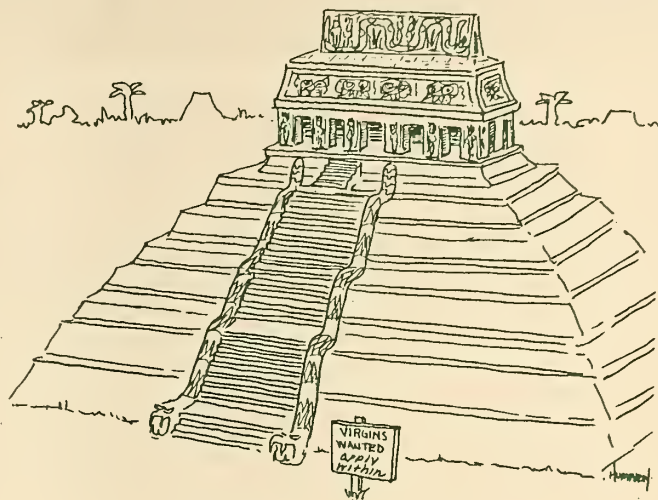
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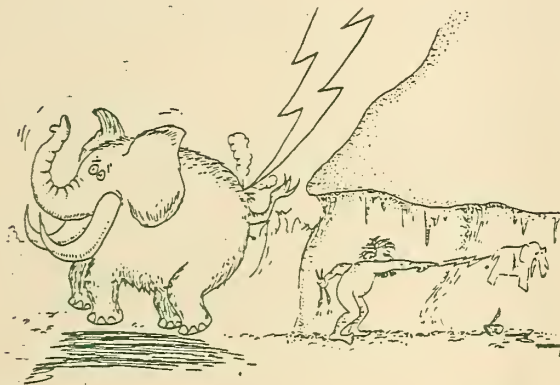
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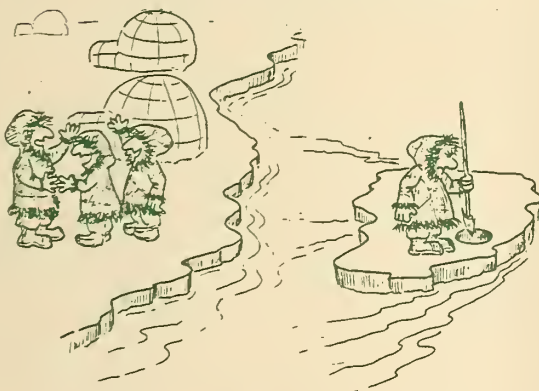
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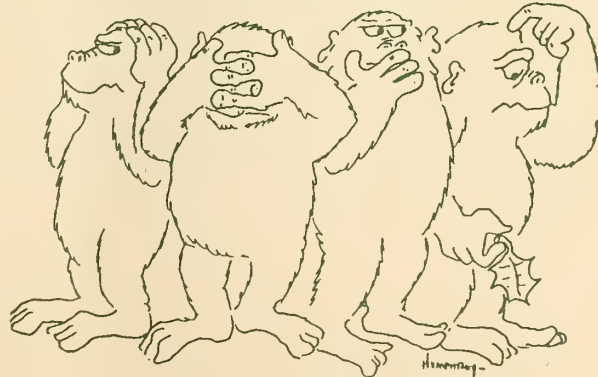
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... ON ETHNOLOGY (1981)



... ON FAMILY LIFE (1983)



... ON SEX (1979)



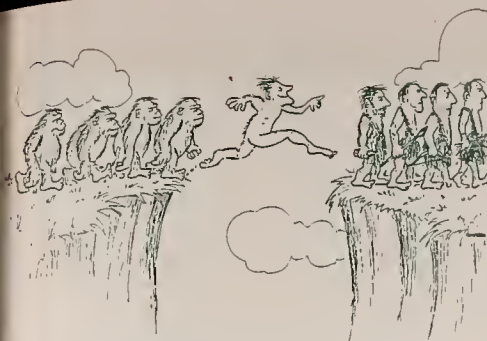
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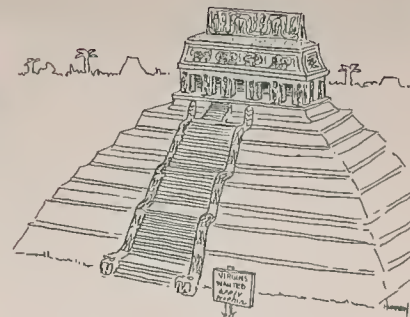
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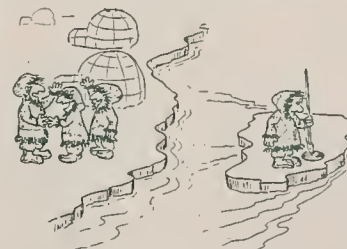
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... ON RELIGION (1982)



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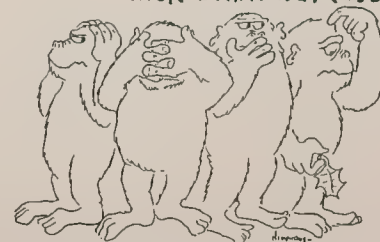
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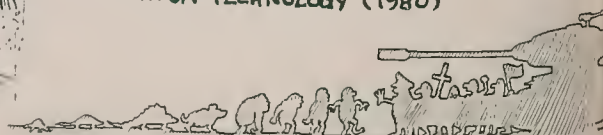
... ON TECHNOLOGY (1980)



... ON FAMILY LIFE (1983)



... ON SEX (1979)



... ON CREATIONISM (1980)

TEACHER'S CORNER: ARCHEOLOGY FOR THE MIDDLE SCHOOL

Although high school students can take an archeology class; dig in Williamsburg and Alexandria, Virginia, Cahokia Mounds, and Pueblo Indian sites along the Rio Grande; or study paleolithic art and archeology in the Dordogne, the middle school student has often been left out. Project Archeology: Saving Traditions, (P.A.S.T.), an interdisciplinary archeology curriculum for middle school and gifted elementary school students, fills that need. It is a four month curriculum program with three units: The Artifact, The Site, and The Culture.

Each unit contains an introduction, advance preparations, safety guidelines, and at least seven sound and stimulating experiential group activities. For example, in the Artifact unit the student activities show how to make a stone tool; to describe, locate, and name an artifact; to sort projectile points; and to come face-to-face with the question of who owns the artifact. Many activities even take students outside the classroom.

The curriculum emphasizes problem solving approaches and combines science, mathematics, and language arts. It contains tests, student field notebooks, lists of State Historic Preservation Offices, a filmstrip and tape about "The Cutting Edge," and the game "Archeology: Can You Dig It?"

The game simulates a fictional archeological site located on the confluence of a river flowing into Puget Sound. The game board illustrates the topography of the area including a steep hill, a mud slide, and beaches, all important to the development of the site. The game cards represent three different cultural levels laid down over a period of 10,000 years, and fate cards determine how many excavation units an archeological crew can dig. As the creator of P.A.S.T., Nan McNutt explains: "Unlike many simulations, the importance of this game is not just in the decision and actions taken by each team but the actual analysis that must take place in order for a conclusion to be presented."

This curriculum has benefited from the close assistance of archeologists and from testing by teachers and students. The project was funded by the U.S. Department of Education. The drawbacks of P.A.S.T. are minimal: a few misspellings such as potatoe and ware; a few items difficult for students to bring from home; and a few overly complicated activities such as the mapping game. But, in the main, it is a sound, stimulating, and welcome curriculum. To purchase, write or call: Sopris West, Inc., 1120 Delaware Avenue, Longmont, CO 80501; (303) 651-2829. \$40.

The following activity comes from Project Archeology: Saving Traditions.

DESCRIBE AN ARTIFACT

What's the Point?

The basis of any science is the researcher's ability to describe his/her observations. In archeology, describing and recording is not only necessary for artifacts but also for soil, features, fauna, flora and even the hunches an archeologist has while working with these materials. Quite often, an artifact is given a name based on its



description, because its use is unknown. In this activity, students will learn description skills and will develop an understanding for the need to precisely describe artifacts.

Time Required: Two to three class periods.

Materials Required:

An "unknown" artifact--some old object that the students may have never seen, e.g. apple peeler

Objects from a junk store or basement (approximately 30)

6 cardboard boxes

Paper and Pencil

Masking tape

40 index cards (3x5 inches)

metric rulers

string that is pre-measured into 3 meter lengths.

Preparation:

Place 5 dissimilar objects and 5 index cards (numbers 1-30) into each box.

ACTIVITY I: THE METRIC ME

Divide the class into groups of four to six. Assign each group a table with a box of five artifacts and ask the group to describe each artifact on individual index cards. The descriptions should include size, shape, color, etc. Measurements of the artifacts should be part of the description. The description should not include a drawing and the actual name or use (e.g. pencil, used for writing) should not be given. Each group should record their artifacts on a page of a notebook.

After each artifact has been "named" and recorded on index cards, have students put the artifacts and cards into the boxes but keep their notebook page. The groups should then exchange boxes and cards with each other.

After the exchange, each group of students should tape the index card to the specimen they think it describes, name each artifact using a "description" (e.g. bifacially flaked tool) and then return the box of artifacts to the original group. The original

group should then check their match with the original list, and compare "description names" to choose the best name for the artifact. The "description names" can be shared orally or displayed with the artifact. Perhaps the students will invent even better names for the objects.

Discussion

Why is it so important for archeologists to use descriptions? What would happen if archeologists did not use descriptive names?

ACTIVITY II: THE UNKNOWN ARTIFACT

Present your "unknown" artifact. Ask students who know the name not to tell anyone. Using the chalkboard, have the class create an "index card" for this object. The index card should include the descriptors, a descriptive name and the possible uses of the object. When suggestions are exhausted, discuss with the class the reasons that archeologists describe artifacts in detail.

Have any students that know the name of the artifact tell its name. If no one knows the artifact, tell the students its name and what it was (is) used for. Have the students explore the ways in which they may have learned about the artifact.

JoAnne Lanouette

* * * * *

SUMMER WORKSHOPS FOR HIGH SCHOOL TEACHERS

The American Anthropological Association (AAA) is sponsoring teacher workshops (for ex. Native American Medicines and Cures, Teaching Anthropology and Archeology, Northwest Coast Art and Prehistory, Flintknapping, Early Man in the New World) at the 1989 Circum-Pacific Prehistory Conference in Seattle, Washington, August 2-6. For information contact: Conference Coordinator, Circum-Pacific Prehistory Conference, 1001 4th Avenue Plaza, Seattle, WA 98154-1001; (206) 464-6580. CEU credits offered.

ANTHROPOLOGY IN PUBLIC SCHOOLS: WHY SHOULD WE CARE?

Imagine the year 2010. On the campus of one large state university, the president is addressing the student body. She explains that in a recent university poll almost half the students identify themselves as belonging to a minority; less than 20% say they are not, to some degree, "ethnic." The president reveals that similar demographics are quietly transforming public schools across the nation, making it imperative that teachers be trained to deal with multi-ethnic student populations.

At the same time, the world's increasingly global society necessitates more teaching of cultural studies in the schools. To meet these changing needs, the state legislature has passed legislation designed to strengthen elementary and secondary education.

The imagined new law (1) establishes a five-year integrated education program whereby all education undergraduate majors must simultaneously earn a bachelor's degree in the liberal arts before obtaining teaching certification; (2) establishes new teaching certification requirements for all teachers that include at least six hours of coursework in subjects relating to cultural diversity, including a mandated course in anthropology; and (3) states that anyone applying for certification to teach high school social studies must have a minimum of six hours of anthropology.

Finally, imagine the president announcing that the anthropology department will be given three new faculty positions in anticipation of the increased need for anthropology teaching.

Is the above fantasy pure wish fulfillment? Perhaps so, but in 1988 the state of Illinois passed a law mandating coursework focused on cultural diversity for all newly certified teachers. Anthropology is cited as one possible course to fulfill this requirement. Furthermore, 25 states now require teachers to obtain bachelor's degrees

outside of education before they get their teaching certificates.

Several years ago AAA President Roy Rappaport called for ways to increase public awareness of anthropology and its influence on public affairs. If anthropology were an important part of teacher training and the high school curriculum--as psychology has been for decades--students would automatically go to college knowing about the subject. As a matter of course, public understanding of anthropology would increase, as well as awareness of anthropology's potential role in the world today and, more important, in the world of tomorrow.

The 1990s presents some unique opportunities for disseminating anthropology into the American educational system. These opportunities grow from new directions within education and within society, as well as from changes within anthropology itself. Within education, national studies, increased anthropology-related subject matter in the curriculum, and the growing ethnic diversity in American classrooms provide a strong context for precollege anthropology. Within anthropology, a growing acceptance of applied anthropology and a willingness to work within mainstream cultures afford opportunities for anthropologists to become involved with precollege anthropology. Most important is the growing awareness of the potential impact such efforts might have on the overall health and future of the discipline.

Changes within Education

National Studies, such as the 1983 Nation at Risk and the 1985 Holmes Report on Teacher Education that called for abolishing the undergraduate education major, propose more science and social science teaching as well as the strengthening of teachers' academic credentials. Some data indicate that the anthropology background of teachers has increased slowly but steadily over the past two decades. It is possible, though difficult to document, that the increased teaching of anthropology in our nation's colleges and universities in the 1960s and early 1970s has resulted in more teachers with anthropology backgrounds.

What is documented clearly is that at least 1500 teachers have participated in in-service anthropology teacher-training institutes over the past decade, the majority in National Science Foundation (NSF)- and National Endowment for the Humanities (NEH)-funded university-based teacher development programs.

Not only have new pressures for change emerged within the education establishment and not only are more teachers aware of anthropology, but additional pressures within school curricula also argue for more formal anthropology in teacher training. The social and intellectual ferment of the 1960s and 1970s left a legacy that had great impact on the schools of the 1980s, particularly in the curriculum and some of the textbooks. In social studies and history classes, the traditional text, once a chronology of political and economic events and elites, now includes at least a minimum treatment of the everyday lives of ordinary people, women's experiences, contributions of ethnic and minority groups, and descriptions of cultures previously ignored, such as Pre-Columbian Native American cultures or West African cultures ravaged by the slave trade. Much of the data and the concepts behind these new materials and approaches arise, of course, from anthropology. Teachers with anthropology degrees would certainly be better prepared to teach today's and tomorrow's curricula.

Changes within Society

Not only are more teachers today asked to teach anthropology-related materials in their classes, but more teachers are living daily with cultural diversity in their classrooms. The demographic shift is all around us: from California, where children from non-European ethnic backgrounds currently constitute 42% of the school-age population, to the Virginia suburbs of Washington, DC, where Asian-Americans comprise a majority in more than a few elementary public school classrooms. This growing diversity in the student population offers anthropologists an important opportunity to form partnerships with those responsible for teacher education and the formation of school curricula. One model exists in California, where

anthropologist Carol Mukhopadhyay worked with education faculty at the state university to develop anthropology-based multicultural teacher education programs for education majors.

Changes within Anthropology

In addition to changes within the educational establishment, the school curricula, and society at large can be added the shifts marking anthropology as a discipline today. As anthropologist Sidney Mintz (Johns Hopkins University) has pointed out, "many of anthropology's most distinguished contemporary practitioners have turned their attention to so-called modern or Western societies," despite the fact that "anthropology has built its reputation as a discipline upon the study of non-Western peoples" (Mintz, *Sweetness and Power*, 1986). Moreover, anthropologists now are working in applied settings, both in the U.S. and abroad. As more anthropologists work in American society, perhaps more will turn their attention to school settings. Directing a teacher-training program, after all, is a type of applied anthropology, with the goal of infusing an anthropological component into precollege teachers' thinking and teaching.

For many reasons, anthropologists are particularly well suited to working in American schools. Because they have been trained to build bridges and to work as sensitive outsiders participating in other cultures, anthropologists possess essential skills for working in and promoting innovations within the subculture of schools. As anthropologists, they share with teachers the role of interpreter, for just as anthropologists try to understand and then interpret their subject matter to the outside world, so teachers interpret their subject matter to their students. In addition, anthropology often entails a strong personal commitment with which teachers can identify.

Though some anthropologists may argue otherwise, many would probably agree that anthropology belongs in our nation's schools, integrated into both the curriculum

(continued on p.15)

("Bones," continued from p. 4)

may also be involved, as some high levels of cavities and periodontal disease have been found in non-agricultural prehistoric Illinois Indians. Since the mineral content of ground water would affect the disease resistance of tooth enamel, such studies pointed to mineral supplementation of drinking water as a means of combating tooth decay. Tuberculosis has been found in skeletons as early as 5000 yrs B.P. in the Old World and by at least A.D. 1000 in the New World. It is associated with keeping livestock and living in sedentary or urban centers. Cemetery studies in Europe have shown a curious relationship between tuberculosis and leprosy, also a very ancient disease. Skeletons rarely show signs of both diseases, and as tuberculosis became more common in Europe in the late Middle Ages, signs of leprosy in European skeletons declined. Medical researchers now speculate that exposure to tuberculosis provides individuals with some immunity to leprosy.

Some health problems are more common in Native Americans than in the general population. One of these is rheumatoid arthritis, which had been thought to be a recent disease possibly caused by an infection. The discovery of rheumatoid-like lesions in prehistoric American Indians has changed the focus of medical research on this disease. Another condition more common than expected in some Native American tribes is the cleft palate/cleft lip complex of congenital bone defects. Clefting of the face has been found in prehistoric skeletons from the same region, though it is not as common as in the modern population. It is not known whether this shows a real increase in the problem, or if burials of prehistoric babies who died from their condition are simply not recovered as often as adults. Some researchers speculate that the increase, if real, might be the result of more inbreeding in tribal populations than would have occurred in the past, after groups were confined on reservations, and traditional migration and marriage patterns were disrupted.

Patterns of Social Organization

It might seem surprising that we can learn much about the patterns of political and social organization of past cultures from a study of bones, but in fact physical anthropologists and archaeologists can discover a great deal about social customs in prehistory through studies of cemeteries. This is only possible, however, with data about age and sex of each burial.

Evidence of status and marriage patterns are often visible in cemetery populations. Anthropologists studying skeletons from the prehistoric North American site of Moundville, Alabama, reconstructed three different status groups in Moundville society. These included individuals whose remains were either used as trophies, or were possibly sacrifices sanctifying the mound-building process, an intermediate group containing both men and women, and a high-status group composed entirely of adult men. By analyzing genetic differences among men and women in the same cemetery, it is often possible to reconstruct marriage and residence patterns. For instance in one study of prehistoric and historic Pueblo cemeteries, women in each cemetery had very similar genetic markers, while the men in each group were quite variable for those same traits. This indicates that women lived and were buried with their kin groups, while men lived and were buried with unrelated groups. The ancient Pueblo people were matrilineal, just as the modern tribes are today. Some studies have revealed a relationship between an individual's status during life, and his or her physical characteristics, such as height. Taller people tend to have higher status markers in their graves in several prehistoric cultures. This is more often true for men, but in some groups taller women also had higher status. By studying skeletons for indications of growth disturbances and disease, scientists can sometimes tell whether the greater height of high status people was due to better diet and more resources, or whether they were just genetically predisposed to be taller.

Conclusion

The above examples show how anthropologists can learn about many facets of the lives of individuals and communities of past cultures by studying the skeletal materials. The study of modern, historic, and prehistoric skeletons has made it possible for anthropologists to contribute an enormous and diverse array of information about human behavior and morphology past and present. None of these studies could have been accomplished without thorough study of human skeletons. To obtain this information, scientists commonly use techniques that were unheard of and unanticipated even a generation ago. It is certain that many more new approaches to reconstructing past lives from bones will be discovered in the future. Many collections may be studied and restudied, in the quest for new answers to old questions, or for answers to new questions altogether.

Prehistoric populations left us little of their history and experience from which to learn. By careful study of their skeletons, we gain an understanding of ancient humans that would not otherwise be possible. The late J. Lawrence Angel, a noted Smithsonian physical anthropologist and forensic expert, always kept a sign in his laboratory: "Hic locus est ubi mortui viventes docent." In this place, the dead teach the living. They teach us about the past, and if we listen carefully, about the future as well.

Recommended Reading:

Brothwell, D. R. Digging Up Bones. 3rd ed. Ithaca, NY: Cornell University Press, 1981.

Ubelaker, D. H. Human Skeletal Remains. 2nd ed. Washington, DC.: Taraxacum, 1989.

Wells, Calvin Bones, Bodies, and Disease. New York: Praeger, 1964.

Kathleen Gordon
Department of Anthropology
Smithsonian Institution

("Public Schools," continued from p.13)

and teacher education. Because anthropology provides a broad cross-cultural perspective, and a framework within which to teach many other precollege science and social science subjects, some would even argue that it should be the basic building block for elementary education and a required subject for secondary school natural and social science teachers. By teaching anthropology to teachers, a perspective and framework are offered within which teachers may better understand the many seemingly diverse fragments of their curricula, enabling them to approach their subjects--geography, social studies, world cultures, history, biology, earth science, language, literature and the arts--in a more coherent and less ethnocentric fashion. As anthropologist Larry Breitborde (Beloit College) has argued, if more anthropologists were to conceive of precollege education as one special form of applied anthropology, perhaps more would be willing to become involved in this important arena critical to the public understanding of the discipline.

If anthropologists are serious about wanting greater public understanding of anthropology, then we would do well to become involved with precollegiate anthropology, through working with teachers, schools and students. If anthropology belongs in our nation's schools, if teachers function better when trained in our discipline, then anthropologists must bear a major responsibility for encouraging anthropology in schools, by working with school administrators, teacher-training establishments and textbook publishers. Fortunately, such work is not only important, but has been demonstrated to be personally satisfying, intellectually stimulating, and professionally productive.

Ruth O. Selig

(Originally published as the "Commentary" in the Anthropology Newsletter, February 1989.)

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Robert L. Humphrey, artist.
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Anthro Notes

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Vol. 11 No. 3 Fall 1989

NEW GENDER PERSPECTIVES IN ANTHROPOLOGY

[Editor's note: The following article is based on Carol C. Mukhopadhyay and Patricia J. Higgins, "Anthropological Studies of Women's Status Revisited: 1977-87," Annual Review of Anthropology 17 (1988):461-95. The authors would be happy to provide reprints of the full review. Write to: Dr. Mukhopadhyay, Department of Anthropology, California State University, Chico, CA 95929.]

Is male dominance universal? Are there any societies in which women are the rulers? The warriors? The major economic powers? When and how did male dominance arise? These are some of the questions feminists of the late 1960s asked of anthropologists and anthropological data. Twenty years later, there is still no definitive answer to most of these questions, but recent anthropological

studies of women have had a profound effect on our present understanding of human society and culture.

In the 1960s, the answers to these questions were sought first through a re-examination of the corpus of anthropological data and theory. It became quickly apparent that there was relatively little information about the female of the species, and that the existing information was permeated by androcentric bias. Female lives were seen through the male eyes of native informants, anthropologists, or both. Anthropological theory presumed that political and ritual leadership were male domains, that men exchanged women in marriage, and that cultural evolution was powered by technological advances in male activities. At a minimum, feminists argued, we must



learn to recognize and to question such assumptions.

New Evolutionary Theories

Stimulated by currents of change in their own society, feminist anthropologists more recently set about the task of formulating more comprehensive theories of gender asymmetry and of collecting new data that could help illuminate female lives, to provide a more gender balanced view of humanity. Through this effort they have contributed to a renewed awareness of how difficult it is even for anthropologists--professionally dedicated to "objectively" understanding other cultures from the "inside"--to avoid contaminating their data and theories with subtle assumptions about their own culture.

One of the first areas in which feminist anthropologists cited deficiencies in theory and data was human evolution, with all its implications about "natural" human behavior. "Man the Hunter" theories had down-played female contributions to human evolution. Such theories tended to portray proto-human society as based on male dominance, female dependency, and monogamous or polygynous mating arrangements. Feminist reaction was to formulate alternative theories that would explain the extant data at least as well, while postulating an early human society that was egalitarian, if not in some ways female centered. Isn't it more plausible, for example, to expect that the first food exchange would be from mother to offspring rather than from adult male to dependent female mate? And that among the first tools would be a baby carrier?

Studies of contemporary non-human primates, which constitute one important source of data for constructing theories of human evolution, seemed particularly susceptible to biased interpretation. Couldn't leadership in a baboon troop be coming from the core of females just as easily as from the "point men"? Couldn't their polygynous mating arrangements be as easily seen as a way for females to rid the group of excess males as it is a way for males to accumulate and control females? And wouldn't the chimpanzee, with its

flexible, gregarious, egalitarian social relations and its genetic similarity to humans, make a better model for early human society than baboons in any case? Such alternate theories have become more sophisticated and scientifically grounded, and new studies of non-human primates, contemporary hunting-gathering societies, and the physical traces of early humans have provided much supportive data. Many features of these alternative theories have been incorporated into the standard accounts of human evolution, although androcentric interpretations and assumptions also persist.

"Culture" vs "Nature," Public vs Domestic Hypotheses

In cultural anthropology the initial efforts of feminists were directed toward explaining male dominance in human societies. As in other branches of feminist scholarship, overtly biologically based explanations largely were rejected out of hand. Data were gathered to argue that male size, strength, and hormone balance were insufficient to explain male predominance in hunting, warfare, physical aggression, and male control of political and ideological spheres. The alternative explanations proposed differed most significantly according to whether it was universal male dominance that was to be explained or the particular (pre)historic conditions under which male dominance arose.

Those who thought male dominance was universal sought some other cultural universal by which it could be explained. An early and influential hypothesis was that the universal division of society into public and domestic spheres, and the association of men with the former and women with the latter, underlies women's secondary status. A related argument asserted that all peoples distinguish culture from nature, define culture as superior to nature, and associate males more closely with the former and females more closely with the latter.

These two early explanations generated much debate and discussion, stimulating new data collection and re-analysis of old data. Ethnographers cited examples of

cultures that did not distinguish between culture and nature, or define culture and nature differently than we do: they identified males rather than females with nature, or equated not the female-male contrast with nature-culture, but a gender inclusive contrast such as married-unmarried or child-adult. While the Hagen of New Guinea, for example, make a conceptual distinction between "wild" and "domestic," which embodies some of what Americans mean when they contrast nature and culture, it does not include the notion that the domestic is superior to and can control or tame the wild. The Hagen have no concept of "nature" and "culture" analogous to the Euro-American one. The Laymi Indians of Bolivia also make a distinction between the wild and the cultivated or social, which includes some but not all of the meanings of the English terms "nature," and "culture." In this case, however, when these terms are applied to humans it is the unmarried rather than women who are seen to be more "wild" and less social and the married (men and women) who are the embodiment of the social. Among the Sherbro of Sierra Leone, it is children who are seen as wild and natural and who are made cultural by their parents and by initiation ceremonies. In our own culture men are not always more closely associated with culture; in fact, women are frequently associated with civility and refinement, as contrasted with the "natural" barbarity and roughness of men. Similarly, ethnographers questioned whether a valid distinction really exists between the domestic and public spheres in foraging and other non-state societies, whether females are always associated with one and males with the other, and whether the domestic is always subordinate and devalued relative to the public sphere. Among the Sherbro, for example, men and women are both actively involved in and associated with both the domestic and the public spheres.

Most of those who did not believe male dominance was universal sought to explain its rise in terms of economics and in connection with the origin of hierarchical societies and the state. Women in non-class, communal societies, best represented today by such hunting-gathering societies as the Bushmen, Australian aborigines, and the

Pygmies, were understood to enjoy a status equal to that of men based on individual autonomy within the context of total group interdependence. Even in those "kin corporate societies" with ranked patrilineages, such as the Nuer, Lovedu, Sherbro, and many other African societies, women as sisters and co-owners of property could be equal to men. It is only with the establishment of class society and state institutions that dependency and subordination become the dominant attributes of womanhood.

While such formulations have become more complex and sophisticated, the ethnohistoric and comparative studies they have stimulated have not always produced results which fit neatly into this new theoretical mold. In many state societies, for example, women of the elite continue to enjoy considerable autonomy, power, and prestige, and some states base their ideologies and political institutions on concepts of sexual dualism or gender parallelism. Among the Dahomy of West Africa, for example, every office was held jointly by two people--a man and a woman--and the queen mother held a position complementary to that of her son, the king; a similar pattern of male and female sharing of positions of highest authority was found in other African societies, such as the Swazi and the Ashanti. Among the Incas, women also held high political positions, but they attained these either through individual achievement or succession in the female line, rather than through their kinship relationship to males. In addition, continuing reports of male dominance in even the most communal, foraging societies can only be reconciled with these theories by arguing that the reports are biased or inaccurate or that the behavior patterns reported are the result of contact with male dominant, state societies.

Sexual Division of Labor

While theorists on both sides of the universality issue sought to distance themselves from biological explanations, all accepted as universal not only the existence of a sexual division of labor, but one with near universal parameters set by reproduc-

(continued on p.13)

HIGH INFANT MORTALITY AMONG THE URBAN POOR

[Editor's Note: Over 10,000 Black American infants die before their first birthdays. The cultural, social, and health factors that contribute to this record high rate of American infant mortality are explored by cultural anthropologist Margaret S. Boone in a new book *Capital Crime: Black Infant Mortality in America* (Frontiers of Anthropology, vol. 4. Sage Publications, Newbury Park, CA, 1989). Dr. Boone is affiliated with the Department of Pathology at George Washington University's School of Medicine and Health Sciences and is presently coordinating a one-year follow-up of 600-800 men and women who have received drug treatment. Dr. Boone recently spoke with Ann Kaupp about her research on infant mortality among poor inner city women in the nation's capital.]

What led you to conduct research on infant mortality?

In the 1970's, I read a newspaper article about the District of Columbia's high mortality rate. Then I learned of a National Science Foundation program that funded scientific research projects in publicly-oriented organizations. I received funding as an anthropologist to work in an inner-city hospital to investigate infant mortality

among the urban poor. I was in residence there for one year (1979-80) but was actually there for about five years, since I became a member of their Internal Review Board as a community representative.

The pregnant women you interviewed suffered from poverty, poor nutrition, and some form of substance abuse. What kind of future did they envision for themselves and for their children?

One of the real striking things about these inner city women is the fact that they don't look into the future very much. These women don't seem to plan. They feel: "What will happen will happen." Certain elements of Oscar Lewis's culture of poverty concept have received a lot of bad press, but he was right on target when it comes to a present-time orientation. For example, many poor people are strongly fatalistic. Because there are not a lot of options laid out by society for these women, they don't define a lot of options for themselves. How can they plan? It doesn't make any sense to them.

Did any of the women try to stop using drugs while pregnant?

The notion that substance abuse can be overcome with just pure will is malarkey. Crack is very addictive and nicotine is almost as addictive. It is unrealistic to think that because a woman is pregnant she'll give



up nicotine, though a lot of them do. Pregnancy was a time when the fewest of them smoke and drink. The heroine addict I spoke with tried to quit, but she wasn't successful for long. A number of the boarders [babies living in hospitals] suffer from AIDS and cocaine addiction. It appears that crack has a strong affect on motivation of poor women, and the craving for it seems to top all other cravings. In studies of mice, the mice kept on taking crack until they died; they didn't care about food. A baby is way down on the list when you talk about a substance that is addictive. You don't even think about taking care of yourself.

How did the women view their pregnancies?

I kept hearing about the importance of being pregnant in and of itself. That pregnancy was highly prized and valued and great disappointment resulted when a child was lost. But none of that seemed very much related to an envisioned household or an envisioned relationship with a man. In other words, it seemed that pregnancy and gestation were separate from childbirth: it was good to be pregnant and to have a child, but it was also good to be pregnant to prove oneself fertile. Men also liked to know they had fathered children. I think this whole notion of reproduction is very important for men and women.

Why is the Black infant mortality rate so high, particularly in Washington, DC?

Blacks have the highest infant mortality rate in the U.S. In Washington, D.C., the rate is about twice what it is for Whites, among whom infant mortality is not good either. Why it's so high is a complicated explanation that involves looking at several demographic factors--fertility, mortality, and migration. Blacks have a higher mortality rate in general. Among poor women, the reproductive cycle seems to be shortened because of ineffective contraception, and the inter-pregnancy intervals are very short. My research pointed out that the women who tend to have the unsuccessful pregnancies--the very low birth-weight infants and stillbirths--are those with short pregnancy intervals, often less than a year.

Can you explain what significance migration has played?

I think that one of the things we all forget is the dramatic change in rural-urban residence for American Blacks this century. Anthropologists who work in the developing world and see that magnitude of rural to urban change are far more impressed. In one generation, American Blacks have changed from three quarters rural to three quarters urban. I don't think we recognize how much of a cultural strain it has been. Washington, D.C. is the first migratory stop northward and more than 50% Black. Most of the Blacks in D.C. are from South Carolina, North Carolina, and Virginia, so they just moved north. Blacks in Texas moved to Chicago. [For this reason], I think in the District of Columbia a lot of cultural patterns were exaggerated, including demographic and health patterns. Theoretical works [describe] how minority groups that have become very large create a situation where an individual can be born, live, and die within their community without much interaction with the larger society. When migration declined, there was less renewal of family values from migrants to northern cities, and the upperly mobile moved to the suburbs. I think that is what has happened in Washington, D.C. What you've got left is a group of very disadvantaged people in the inner-city.

Do you think these women are getting adequate information about birth control in their communities?

The women I talked with knew about birth control, about all kinds of [contraceptives] and how they worked, but they just didn't use them. They couldn't explain why. When I asked about contraception used between pregnancies, they told me about the different kinds they tried but said none of them worked. If they know about all these methods then why don't they work? Again, I think it's because children are so valued. What these women value is what their community values. People in their environment are having a lot of children and they're put under a lot of pressure to do what their peers are doing. Traditionally, the childbearing pattern has begun early; the average age of the first pregnancy of

the group that I studied was 18 years old. But childbearing stops earlier than among Whites.

Is prenatal care easily available for these women?

We assume something is easily available if we can drive there, if it has certain hours such as 9-5, and if it's considered a good and necessary thing by our peers. But all those things don't match. In other words, they can't get there in cars, they can't get there during open hours, and their peers are not pushing them to do it. If you define availability that way, it's not available. It's not a high priority, especially with all the road blocks.

What role does education play?

In my study, the women who had low birth-weight infants and those who had normal weight infants didn't differ in the number of years of education. I was wondering why in the world this was, and that was one of the advantages of the more sophisticated statistical methods such as cluster analysis. Cluster analysis, a technique that tends to group your cases, or factor analysis which reduces your variables to something more basic, revealed something very interesting with respect to education and social class. It helped me develop a hypothesis about why education doesn't work. A small group at one side of the cluster diagram, which I named "Brenda's Group," showed larger and healthier babies, and the only thing that distinguished them was years of education of the woman and of the woman's partner, the father of her infant. So what I came up with was a model that said basically that the reason education doesn't work in the inner city, in a statistical way, to distinguish women with normal and very low birth-weight deliveries is because everything else is "swamping it." In other words, with quickly paced pregnancies, drugs, smoking, poor nutrition, and environmental factors such as pollution, education doesn't mean as much as it should. It doesn't even have a chance to have an effect.

If you want to talk about policy implications, what that basically says is that

you can throw all the education at the inner city you want, but if you don't get rid of crack, heroine, smoking, and don't teach women to use contraception better so they can space their pregnancies, education is not going to do any good at all.

From my research, I came up with a model using a regression technique for a woman who is best off. The woman who is so-called "best off" has had prenatal care for the pregnancy in question, has no history of hypertension, engaged in no form of substance abuse, street drugs, alcohol, or nicotine, and was within the 20-24 year age range (that's where the distribution shows the best pregnancy outcomes). I looked at this small group and another very interesting factor came out--the education of the man, which was important for these women. I found that fascinating. This leads to all kinds of hypotheses about men having a very strong effect on this process. We think of men and infant mortality as completely separate, but it's not true. You ask yourself, does the man encourage his partner to get prenatal care because it's his child who's at stake? Or is it that the better educated man picks the better educated partner?

What is the role of men?

From very good to very bad. I think we tend to forget about men in this whole process. Inner city women have obviously developed a very adaptive structure through the female network, that Carol Stack described in *All Our Kin*. This network pools resources and refrains from reliance on men, because men drain resources, and gives women a way to rear children without consistent support from men. But I think you need to bring men back into the process, to get teenage fathers interested in it. The more interested a man is in his child, the more he will provide financial support when he can, and also emotional support to the woman. I think you need to bring men back into the whole process of keeping women and children healthy. In other words, don't go with the female network just because it's been a marvelous adaptation. Let's work with it, but let us not exclude men in the process.

(continued on p.10)

TEACHER'S CORNER: THE LAND AND PEOPLES OF ALASKA AND SIBERIA

The tragic oil spill in Prince William Sound earlier this year made the nation keenly aware that people's livelihoods and animals' lives depend upon a clean Pacific ocean. Yet the people, cultures, and ecological zones from 48 degrees north to the Arctic Ocean remain a mystery for many. All too often students think that only Eskimos live in what must be solely a frozen wilderness and that they are Indians living in igloos. A new teaching guide corrects such misconceptions and ignorance. History, geography, science, and anthropology teachers in grades 7 through 10 will value and enjoy Crossroads of Continents: Cultures of Siberia and Alaska.

This instructional guide, produced by Carolyn Sadler and Laura Greenberg from the Office of Education, National Museum of Natural History and the Smithsonian Institution Traveling Exhibition Service, grew out of the recent exhibition "Crossroads of Continents," but only the last of the seven activities requires a visit to the exhibition. (The exhibition will be at the American Museum of Natural History, New York City, November 26-March 25, 1990; Gene Autry Western Heritage Museum, Los Angeles, October 21-February 24, 1991; Anchorage Museum of History and Art in Anchorage, April 7-August 11, 1991; and the Canadian Museum of Civilization, Ottawa, September 22-January 26, 1992. From there it will make several stops in the Soviet Union.)

This curriculum packet is the first complete educational package focusing on the cultures of the North Pacific Rim and provides the only up-to-date information about this region easily accessible in English. The guide comes with a clearly written booklet; a poster map on the traditional dress and housing of the region's people; a 32-minute video on the history and anthropological research of the area and the peoples in the 20th century; a pronunciation guide for names such as Inuit, Chilkat, and atlatl; an excellent set of 57 photographs; a glossary; a filmography; a bibliography; and answers

to study questions. Students read three valuable primary sources: the journal of an 18th century explorer naturalist, a contemporary high school student's account of an archaeological excavation, and the archeological director's description of the dig. (The last two were published in the winter 1988 issue of *Anthro.Notes*.)

Through a set of carefully coordinated and sequential exercises, students can see for themselves the connections between environment and culture. A biogeographical approach emphasizes the geographical distribution of living things. In the first unit, "Geography of the North Pacific Rim," students locate and label on a map the significant places in the far northern rim of the Pacific Ocean such as the Bering Strait, The Aleutians, The Chukchi Sea, The Amur, and Cook Inlet. In the next unit, "Environments of the North Pacific Rim," students first map the location, the climate, and the vegetation of their home area, and



then learn about the four major land environments in the Crossroads area: the tundra, the taiga or boreal forest, the mixed forest, and the temperate rain forest. Using photographs and characteristics of the four environments, students decide which environment is represented in each photograph. Then, with the first map, the poster map, and *Goode's Atlas*, they draw in the different environmental zones using a color code.

In the third unit, "Cultures of the North Pacific Rim," the students map the North Pacific Rim cultures after reading about culture and adaptation. Using a separate color for each group, the students identify each group on the map--The Eskimo cultures (The Siberian Yupik, the Bering Sea Yupik, the Inupiat, and the Pacific Eskimos); the Chukchi and Koryak of Siberia; the Athapaskans and the Even; the Northwest Coast Cultures; and the Amur Cultures. Next, students draw in and label the traditional or subsistence economies on the map.

Finally, the interconnections begin, and biogeography is in action. Looking at their maps, students answer a set of problems in order to see why some cultures have adapted the way they have, why some areas are able to have varied economies, and why housing and dress are made the way they are. Most of the time there is a close link between culture and environment and between culture and subsistence, and with these maps students can intelligently understand why.

The last three units are: "Traveling with Vitus Bering," with a focus on interpreting history; "Unearthing the Past," the Ungaluyat project, emphasizing excavating history; and "Joining the Jesup Expedition," focusing on doing fieldwork, studying a single society (ethnography), and studying a topic cross-culturally (ethnology).

Many of the activities cannot be reproduced easily for *Anthro.Notes* because they involve a video, photographs, or a poster map, but two activities are reproduced below for your use in the classroom. For information on borrowing, free, the entire Crossroads educational package write to: Carolyn Sadler, Office of Education, National Museum of Natural History, Smithsonian Institution, Washington, DC 20560.

1. NATURAL HISTORY FIELDWORK IN YOUR AREA

(This activity, "Environments of the North Pacific Rim," gives students practice observing and documenting.)

Visit a natural area, a natural park, or a section of undeveloped land. Take notes on what you see and make a map. Describe the landscape, vegetation, animals (including insects and other invertebrates), and evidence of humans. Make a collection of leaves and flowers (beware of poison ivy, oak, and sumac). Put each plant sample into an envelope, and on the outside write your name, the date, the location, and the type of habitat (such as broadleaf forest, high plains, marsh, field). This is your "documentation." Also make drawings or take photographs of the area. (Sketches are fine--these do not have to be art works.)

When you get home or to school, use a plant identification book to find out the common and scientific names and other information about the plants such as their geographical distribution. Then find out from this book or ask your teacher about how to "press" your plants to preserve them.

Finally, using a looseleaf notebook, write a report about your field trip. Include your general observations, a map, and drawings. Have a separate page for each dried leaf or flower with a description of it that includes your field notes and the plant's regional and/or world distribution.

2. TRAVELING WITH VITUS BERING

(This exercise gives students an historical perspective and practice in interpreting historical information.)

In July 1741, the Russian expedition led by Vitus Bering made landfall for the first time on the American continent. They had embarked from a port on the Kamchatka peninsula. Among the first to go ashore was Georg Steller, a German naturalist, who had accompanied the expedition. In the following diary entry (translated from the original German), Steller describes his first few hours on land. He encounters no people, but he gets his first impressions of

them nonetheless. The date is July 20, 1741. The place is probably Kayak Island [in the Gulf of Alaska near Prince William Sound], and the people may have been Tlingit Indians. Steller's diary was first published in 1793. The following excerpt is from vol. II of *Bering's Voyages: An Account of the Efforts of the Russians to Determine the Relation of Asia and America* by F.A. Golder, published by the American Geographical Society in 1925. In 1917 Golder discovered Steller's original manuscript in Leningrad (then Petrograd). The writing and language may seem unusual, but students should remember this is a message from another time, another culture, and another place.

[Excerpt Begins]

As soon as I, with only the protection and assistance of my own cossack, had landed on the island and realized how scant and precious was the time at my disposal, I seized every opportunity to accomplish as much as possible with the greatest possible dispatch. I struck out in the direction of the mainland in hopes of finding human beings and habitations. I had not gone more than a verst [about two-thirds of a mile] along the beach before I ran across signs of people and their doings.

Under a tree I found an old piece of log hollowed out in the shape of a trough, in which, a couple of hours before, the savages, for lack of pots and vessels, had cooked their meat by means of red-hot stones, just as the Kamchadals did formerly. The bones, some of them with bits of meat and showing signs of having been roasted at the fire, were scattered about where the eaters had been sitting. I could see plainly that these bones belonged to no sea animal, but to a land animal. . . . There were also strewn about the remains of yukola, or pieces of dried fish, which, as in Kamchatka has to serve the purpose of bread at all meals. There were also great numbers of very large scallops over eight inches across, also blue mussels similar to those found in Kamchatka and, no doubt, eaten raw as the custom there. In various shells, as on dishes, I found sweet grass completely prepared in Kamchadal fashion, on which water seemed to have been poured in order to extract the sweetness. I discovered further (not far

from the fireplace) beside the tree, on which there still were the live coals, a wooden apparatus for making fire, of the same nature as those used in Kamchatka....

After having made a brief investigation of all this, I pushed on farther for about three versts [about 2 miles], where I found a path leading into the very thick and dark forest which skirted the shore....I held a brief consultation with my cossack, who had a loaded gun, besides a knife and commanded him to do nothing what-soever without my orders....After half an hour we came to a spot covered with cut grass. I pushed the grass aside at once, and found underneath a cover consisting of rocks; and when this was also removed we came to some tree bark....All this covered a cellar two fathoms deep in which were the following objects: 1) lukoshkas, or utensils made of bark...filled with smoked fish of a species of Kamchtkan salmon...2) a quantity of sladkayatrava (or sweet grass), from which liquor is distilled; 3) different kinds of plants, whose outer skin had been removed like hemp...and perhaps are used, as in Kamchatka, for making fish nets..."

[Pause In Excerpt]

Here we briefly interrupt Steller's account in the interests of time. After exploring the cellar further and discovering a few arrows, Steller takes some fish and other goods as proof of what he found--and reluctantly, after being summoned by Bering, returns to the ship. In return, following Steller's suggestion, some goods were sent to the cellar. These were described as follows:

[Excerpt Begins Again]

...an iron kettle, a pound of tobacco, a Chinese pipe, and a piece of Chinese silk were sent to the cellar, but in return the latter was plundered to such an extent [by Steller's shipmates] that, if we should come again to these part, the natives would certainly run away even faster or they would show themselves as hostile as they themselves had been treated, especially if it should occur to them to eat or drink the tobacco, the correct use of which probably could be as little known to them as the pipe itself....[it was suggested to leave a] couple

of knives or hatchets, the use of which was quite obvious [and] would have aroused... interest....But to this it was objected that such presents might be regarded as a sign of hostility, as if the intention were to declare war. How much more likely was it, particularly if they attempted to use the tobacco in the wrong way, for them to conclude that we had intended to poison them..."

Interpreting History (group discussion)

1. How did Steller refer to the natives?
2. How did he know what the foods and implements were?
3. Do you think any of the peoples on shore witnessed Steller's activities? How would we know if they had?
4. Let's assume that some Tlingit people watched every move Steller and the Cossack made. If they had no system of writing, how might it have entered their history? How would their history be different than written histories? What kind of information might be accurate and inaccurate in oral history and in written history?

The Other Side of the Story (individual or team writing exercise)

Write about the Steller episode from the Tlingit point of view. Imagine it is 1741, and you observe Steller and the others come ashore. How would you describe the episode to a close friend, also Tlingit, who was not there? What did Steller and his cossack look like? What did you think they were doing? What were your feelings as you watched?

Extra Project--Putting Steller in Chronological Context

The State of the World in 1741. You are an 18th century scholar who is preparing a world almanac for 1741. What are the major countries, who is in power? What are the current events? The latest discoveries and technologies, the major intellectual and artistic figures? Write a 2-5 page report. You can use *The Timetables of History* for the year and its events, and history books for an overall perspective of the times.

JoAnne Lanouette

("Infant Mortality" continued from p.6)

How would you describe the household makeup these women belong to?

There are more women raising children in a matrifocal household than in a household with a conjugal pair, I mean any kind of conjugal pair. There were not more than three households out of the 210 I looked at, where women were married and living with their partner and raising their child. Everyone else was divorced, separated, or sometimes living with mother and father, mother and boyfriend, grandmother and grandfather. Of the conjugal pairs, almost none were the woman and her partner, but rather an aunt and an uncle or somebody else, usually of an ascending generation.

Do you have much hope for the future of these women and future generations?

The problem of maternal and infant health care is always going to be present. What gets attention and money are waves of lifestyle epidemics, first heroin, then crack. It seems like every cataclysm in lifestyle that the United States goes through eventually hits the inner city Black community the hardest. That's where the money goes, but underlying this is a constant need for prenatal care and its availability. Cocaine babies actually have a reduction of brain cells at birth. This drug causes permanent organic damage, and it's not going to go away. The damage it causes will show up in kindergarten, in grade school, in later divorce rates. We need to understand that culture, or ethnic group, influences drug-taking. Culture tells you why you drink, or why you take crack. What I am so concerned about in terms of public relations on this issue, is that your average middle class suburbanite has no notion that he or she is the one paying for the crack babies, through taxes, through loss of productivity, through the diminishment of what I call the "public good."

THE AAA TASK FORCE ON TEACHING ANTHROPOLOGY

Anthropology has long lagged behind the other social sciences in the level of professional attention and support its national organization provides to precollege education. Partly in recognition of this past history, the American Anthropological Association's new Programs Department helped form an official AAA Task Force on the Teaching of Anthropology in the Schools that will exist for four years: November 1988 to November 1992. The co-chairs of the task force are Jane White (Education Dept., Univ. of Maryland, Catonsville, MD 21228; 301/455-2378) and Patricia J. Higgins (Dept of Anthropology, SUNY-Plattsburgh, Plattsburgh, NY 12901; 518/564-4003).

This task force culminates several years of collaborative effort by anthropologists in the United States and Canada who organized symposia and workshops, obtained grants for developing curriculum materials and teacher training programs, worked with other organizations such as the National Council for the Social Studies, and helped stimulate interest in and legitimacy for precollege anthropology within the discipline. Since 1979 Anthro. Notes has been in the forefront of this effort. (Anyone seeking a review of this work should consult Practicing Anthropology 8:3-4, a special issue devoted to precollege education, available free-of-charge from Ruth O. Selig, SI-120, Smithsonian Institution, Washington, D.C. 20560.)

The overall mission and mandate of the official AAA task force is to encourage the

effective teaching of anthropology in North American schools--at various grade levels and through a diversity of specific subjects. Three major task force goals have been outlined:

1. To explore the conditions that contribute to or impede the teaching of anthropology in North American schools.
2. To make recommendations on the curricular role of anthropology and how all those concerned--teachers, students, parents, school administrators, teacher educators, college and university professors, publishers, community educators and boards of education--might strengthen teaching and learning through the use of the anthropological perspective.
3. To help the staff of the American Anthropological Association, specifically the

Director of Programs, promote the teaching of anthropology in schools.

The task force is divided into four working committees, each with a focused set of objectives. These committees and their chairs are:

Committee One:
Research on Anthropology in Schools (Paul Erickson)

Committee Two:
Development of Guidelines for the

Teaching of Anthropology (Jane J. White and Charles Ellenbaum)

Committee Three: Review and Development of Curriculum Materials (Ruth Selig and Ann Kaupp)

Committee Four: Outreach (Patricia Higgins)



Some of the specific projects the task force hopes to complete through its committees are:

- surveying requirements for teacher certification to teach anthropology and/or social studies in precollege classrooms and proposing ways to increase anthropology's participation in this process;
- evaluating materials currently available for teaching anthropology as well as encouraging the development of new materials;
- developing and distributing resource lists, curriculum guidelines, bibliographies, and packets of materials useful for teachers;
- facilitating the publication of booklets and bulletins helpful to those teaching anthropology;
- developing and maintaining a mailing list of teachers interested in integrating anthropology into their curricula;
- organizing workshops, as well as in-service and pre-service anthropology courses for teachers;
- working with social science and science organizations and with teacher organizations.

Anyone interested in joining one of the committees of the Task Force on the Teaching of Anthropology in Schools should write or call one of the Task Force Co-chairs, or contact the editors of AnthroNotes. The task force needs help from both teachers and anthropologists, and anyone with interest, ideas, and energy is encouraged to join.

Ruth O. Selig, Co-Chair
Task Force Committee 3

DO YOU KNOW?

● that a new series titled "Indians of North America," Frank Porter III, General Editor, appropriate for junior and senior high school students is now available. Some of the books published thus far cover the Cherokee, Seminole, Crow, and Cheyenne. Write: Chelsea House Publishers, Dept. WP3, P.O. Box 914, 1974 Sproul Rd., Suite 400, Broomall, PA 19008-0914.

● that a new series--"Raintree American Indian Stories" and "Raintree Hispanic Stories"--for upper elementary students is also available. Write: Raintree Publishers, 310 W. Wisconsin Ave., Milwaukee, WI 53203.

● that the Harris Educational Loan Center, Field Museum of Natural History, lends free natural history materials in the form of small exhibit cases, experience boxes, and audiovisual and printed materials to educational organizations. For example, social studies experience boxes cover such topics as American Indian Games, Eskimo Spiritual World, Ancient Egypt: Planning for the Afterlife, African Musical Instruments. For more information, write: Field Museum of Natural History, Harris Educational Loan Center, Department of Education, Roosevelt Rd. at Lake Shore Dr., Chicago, IL 60605-2497.

● that you can obtain an educational resource publication on "The Native Peoples of the Northeast Woodlands" free from the Education Office, Museum of the American Indian, Broadway at 155th St., New York, NY 10032.

● that a new video, first of a series, "The Navajo: Legend of the Glittering World," is available for \$29.95 from The American Indian Cultural Foundation, P.O. Box 3776, Page, AZ 86040.

("Gender" continued from p.3)

tive roles. It is women's reproductive roles that lead them to be more closely associated with the domestic sphere or to be seen as closer to nature than are men. It is again their reproductive roles that cause women to be less involved in trade or in other economic activities with variable outcomes and, therefore, less able to mobilize the labor of others. At the same time they are more subject to double exploitation as producers and reproducers when hierarchical societies arise.

Newer studies of fertility, pregnancy, nursing patterns and child-rearing have shown us, however, how flexible reproductive roles actually are and the extent to which societies, families, and individual women make choices concerning both reproductive and productive activities. Women around the world control their reproductive lives by a variety of techniques ranging from abstinence to infanticide. In many societies toddlers are cared for by older children, freeing mothers for more "productive" work; among the Nandi of Kenya child nurses do more child care work than do mothers. Even infancy can be handled in many different ways. Among the Bushmen, infants are in physical contact with the mother 70-80% of the time for their first year; among the Pygmies, infants are cared for and nursed by a number of different people. Furthermore, the tendency for feminist theories to see women's reproductive roles as limiting and debilitating rather than empowering, and the associated absence in feminist anthropology of serious development of matriarchal theories, should alert us to another area in which the assumptions of our own male dominant culture may be restricting the development of anthropology.

Women in Economics and Politics

Early efforts to provide a theoretical explanation of male dominance (universal or not) as well as to document the extent of its existence, were clearly limited by the quality of the data available on women's lives and gender relations. A major effect of feminist questions, therefore, has been the publication of much new ethnographic

data on women--some of it culled from old field notes, most of it newly collected. These new data look at many aspects of women's lives, including their economic, political, ritual, and expressive activities as well as their reproductive, family, and "domestic" roles. These data derive from many culture areas and represents a variety of theoretical perspectives. Such ethnographic data can and should be infused into all anthropological teaching, and several recent reviews and guides to the literature facilitate this process. Here I can only give a few examples of the diversity of the literature and the impact it is having on our understanding of culture, and of anthropology.

Much of the new data looks at women's economic roles. Women have always worked, they have always made an economic contribution, and they have never been mere dependents. Early research showed that in contemporary hunting-gathering and horticultural societies women often contribute more than men do to the basic subsistence of the group. More recently a few cases have been documented in which women even hunt, an activity long thought to be an exclusively male preserve. Among the Tiwi of Northern Australia, for example, women hunt small animals using dogs and digging sticks, and among the Agta of the Philippines most women in nearly every age group hunt regularly using the same tools and techniques men use. While the existence of women hunters has challenged previous ideas about the limitations placed on women by size, strength, and reproductive roles, more careful attention to women's work has also challenged the way we define work. It has made us more aware that our definition of processing activities as domestic, and domestic activities as less important, has made us discount much of women's work in non-industrial societies, just as counting only wage labor as work has led economists, sociologists, and historians to ignore women's economic contributions to industrial society.

At the same time, studies of women's economic activities has also shown that making a large contribution, even through basic subsistence activities, does not

necessarily entail economic power or social prestige (although control over the early stages in a production/distribution process may help to establish control over the entire process). Among New Guinea horticulturalists, such as the Hagen, women commonly do the bulk of the crop cultivation and also the raising of pigs, yet most ethnographers have seen these as highly male dominant societies. Feminist anthropologists turned their attention, therefore, to distribution and its control, to women's activities in exchange systems, and to more direct studies of decision-making, leadership, and politics. While a matriarchal society, in which women dominate men and regularly hold top positions of power and authority is yet to be documented, anthropologists are noting a larger number of societies in which women, individually or collectively, do hold leadership positions of considerable power. A classic example is the Iroquois, where women selected and could depose the chief, although that position was always held by a male. Other examples include the Inca and African societies cited above. Closer study has also shown the many ways in which women are involved in and influence decision-making, even in what appear to be the most male dominant societies. Considerable evidence now exists, for example, that New Guinea women, far from being powerless, make key political decisions in allotting pigs and shaping the exchange relationships of the men.

As in the realm of economics, the study of women in politics has had as much of an impact on the way we look at politics as it has on the way we look at women. Informal decision-making, for example, can be as important as the formal variety, whether it is women, men, or both who are involved, and decisions affecting society as a whole can be made from within the domestic sphere. The study of women in politics has also made us aware of our androcentric biases, as we see how often ethnographers treat women's talk as gossip (but men's as information exchange and networking) and women's organizations as recreational or even frivolous rather than bases for political power.

Biases in Interpretation

Investigations of family roles, the one area in which women were likely to be found in the older ethnographies, have also taken new directions in response to feminist interests. Recent studies look beyond woman as wife and as mother of young children, to woman as sister, aunt, co-wife, mother of adult children, or active agent in extended kinship networks. The arrangement of marriages in Saudi Arabia, Iran, and other Middle Eastern societies, for example, is largely handled by older women (who, after all, are the only members of the groom's family able to meet and observe prospective brides in sex-segregated societies), although decisions may be announced by males. Our culture's definition of the family as a nuclear, child rearing unit and our idealization of young adulthood, especially for women, has imposed narrow blinders on our view of women in other cultures. As we increasingly note the power and prestige that older women have in many societies--societies as varied as the Iroquois, the Yanomamo, the Chinese, and the Indian--we see how deviant, in cross-cultural terms, our own society is. At the same time, the common attribution of this power and prestige of elder women to "freedom" from childbearing, rather than to the mobilization of adult offspring as a source of labor or as a core political following, serves as another illustration of subtle biases in our interpretation of other cultures.

As feminist anthropologists have become more conscious of the extent to which the assumptions of our own culture color our work as anthropologists, they have also become more involved in studies of American culture. A surprisingly large number of those anthropologists who contributed to the earliest feminist reformulations of the 1970s have, in the 1980s, turned to research in the United States, where they have been joined by other, relative newcomers to the field. As a result, we now have ethnographically based studies of American women's (paid) work and work cultures; of their family and kinship activities; of their reproductive lives and concepts of body; of the domestic division of labor and decision-making; and

of social issues of great consequence to women such as abortion rights, the Equal Rights Amendment, and conservative feminism. In the study of women in the United States, as in other culture areas, attention has come to focus increasingly on the diversity of women's lives and on ideologies of gender and their impact on our actions.

Overall, the anthropological study of women has moved, in these two decades, from a search for broadly applicable explanations of male dominance to the study of inter-cultural and intracultural variability in women's lives, male-female relationships, and gender concepts. We have found that the biological differences between the sexes, whether in reproductive functions, body structure, or hormone balance, impose few absolute constraints and are themselves interpreted and given cultural meaning in a wide variety of ways. We have also found that the many roles women occupy, often simultaneously, may confer different degrees of power, authority, and prestige, and that there may be no one "status of women" in any single society, let alone cross-culturally. Our measures of women's status have been shown to be biased by the values of our culture--values that may not be shared by women of other cultures. We have been led to question not only the old androcentric paradigms, but also the new feminist alternatives as we try to free ourselves of Western cultural assumptions--such as the primacy of the individual and of material production. In the process, the focus has shifted from the study of women to the study of gender--an analytical concept comparable to kinship, economics, and politics--and a position from which the anthropological study of women should have an even stronger impact on anthropology as a whole.

Recommended reading:

Collier, J. F. and S. J. Yanagisako, eds.
Gender and Kinship: Essays Toward a Unified Analysis. Stanford, CA: Stanford University Press, 1987.

MacCormack, C. P. and M. Strathern, eds.
Nature, Culture, and Gender. Cambridge: Cambridge University Press, 1980.

Ortner, S. B. and H. Whitehead, eds. *Sexual Meanings: The Cultural Construction of Gender and Sexuality*. Cambridge: Cambridge University Press, 1981.

Rosaldo, M. Z. and L. Lamphere, eds. *Woman, Culture, and Society*. Stanford: Stanford University Press, 1974.

Sacks, Karen. *Sisters and Wives: The Past and Future of Sexual Equality*. Westport, CT: Greenwood Press, 1979.

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SI PROGRAMS ON GENDER

View "Men and Women: A History of Costume, Gender, and Power," a new exhibit at the National Museum of American History.

A symposium, "Gender Perspectives: The Impact of Women on Museums" will be held at the Smithsonian, March 8-10, 1990. For further information write or call: Artemis Zenetou, Program Coordinator, Arts & Industries Bldg., Room 2225, 900 Jefferson Drive, S.W., Washington, DC 20560; (202) 357-1331.

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Anthro Notes

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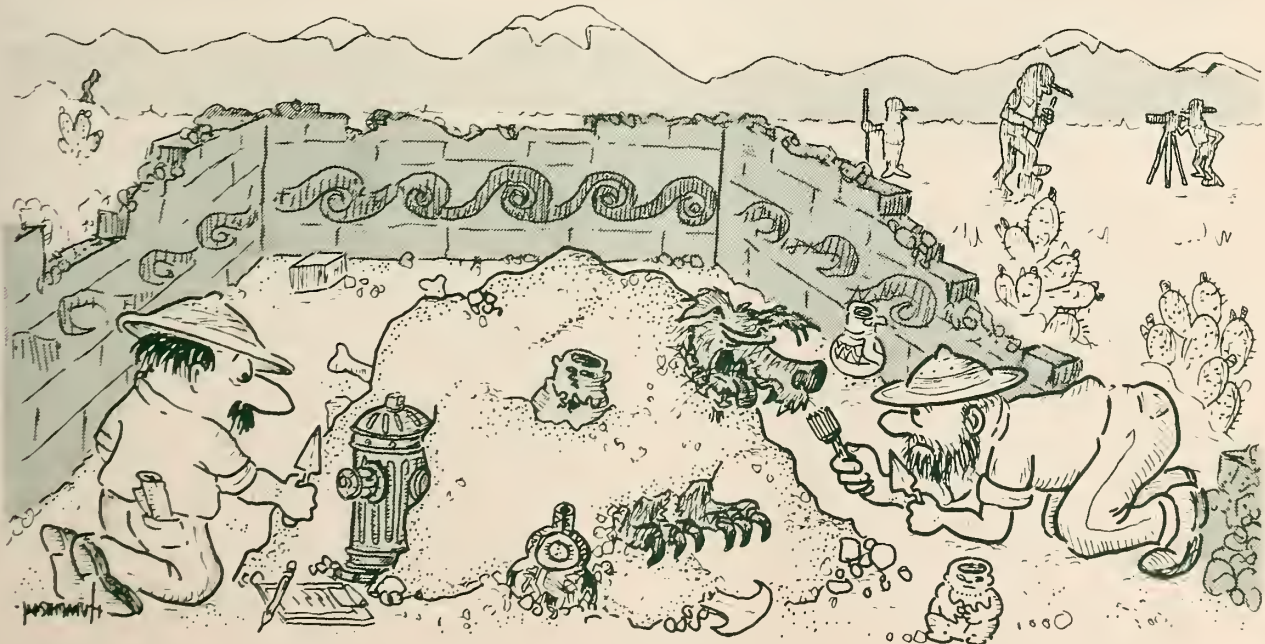
Vol. 12 No. 1 Winter 1990

THE MOCHE: PROFILE OF AN ANCIENT PERUVIAN PEOPLE

[Editor's Note: A recent discovery of a royal tomb at Sipán has focussed public attention on the Moche, an ancient but little-known Peruvian culture [see *National Geographic* reference]. Numbering as many as 50,000, the Moche were an agricultural people who resided along the northern coast of Peru as early as 1,200 years before the Inca. In one of the world's driest deserts, they diverted streams from the adjacent Andes into a large network of irrigation canals to grow corn, beans, squash, peanuts, peppers, potatoes, and manioc as well as avocados and other fruit. They kept guinea pigs and ducks, herded llamas for wool and meat, raised crawfish in the irrigation canals, and fished and hunted sea lions from boats. Their territory stretched over 220 miles along the coast and included towns of up to 10,000 inhabitants: warriors, priests, nobles, artisans, traders, servants,

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farmers, and fishermen. To house their dead they built platforms topped with pyramids, today called huacas. Moche art and technology were comparable in sophistication to that of the Maya, their contemporaries. Beautiful gold and copper metalwork, inlays and beads of turquoise, shell and coral, woven materials, and richly decorated ceramics depicting everyday scenes, warfare, and ritual have been uncovered in the tombs. However, unlike the Maya, the Moche did not develop a writing or glyph system. John Verano, a Smithsonian physical anthropologist who assisted at the excavation, shares what he has learned about the appearance, health, and lifestyle of these ancient Peruvians.]

Ongoing excavations at the site of Sipán, directed by Peruvian archaeologist Dr. Walter Alva, are revealing a wealth of new



information about the ancient Moche civilization. Over the past several years, I have had the good fortune to be able to work with Dr. Alva in Peru, helping to analyze the skeletal remains from the Sipán tombs and other sites.

Ancient Peoples of the Coast

The Moche are one of several ancient civilizations that developed in the coastal valleys of northern Peru. The Moche Kingdom dominated the north coast from about A.D. 100 to A.D. 750. Their culture disappeared some 700 years before the Inca Empire began expanding out of the southern highlands. Best known for their beautiful ceramics and expressive art style, the Moche also left evidence of their relatively brief florescence in the form of numerous mud-brick pyramids, which still dot the river valleys of the north coast today.

Human occupation of the coast of Peru goes back many thousands of years. Survival in the otherwise inhospitable coastal desert of Peru is made possible by a series of seasonal rivers and streams that carry water down from the western slopes of the Andes Mountains. These rivers turn the narrow coastal valley floors into green oases, a stark contrast to the surrounding barren desert. Ancient peoples of the coast learned several thousand years ago to draw water off of these rivers into irrigation canals, turning desert into productive agricultural land. Over the centuries many technological advances were made in canal building, eventually leading to complex irrigation networks, which linked several valleys of the North Coast and provided productive agricultural land for thousands of coastal inhabitants.

When the Spanish conquistadors first passed through the northern coastal valleys in the 1530's, they marvelled at the size and sophistication of the irrigation networks. Strangely, however, these first European visitors found many valleys only sparsely populated, and numerous agricultural fields abandoned. What the Spanish did not know at the time was that a devastating disease, probably smallpox, had spread through the Inca Empire some ten years earlier, taking thousands of victims with it. Smallpox, which had swept like wildfire through the Caribbean, Mexico, Central America and

then down through Ecuador and Peru, was one of the most deadly of the many infectious diseases brought from Europe to the New World in the 16th century. New World peoples, who had no immunity to the disease, died by the thousands. The epidemic which swept through Peru in the 1520's killed the Inca Emperor and his legitimate heir and led to a bitter civil war between contenders for the throne. It was this divided and traumatized empire that Francisco Pizarro and his soldiers boldly conquered in 1532.

Conquistadors and Huaqueros

By the end of the 16th century, disease, conquest, and social disruption had forever changed the face of the North Coast of Peru. The last of its great civilizations had collapsed, and much of its rich past was lost before it could be recorded by historians. Conquistadors who had sacked the last of the gold and silver from the storehouses and temples of the Inca, then turned to the pyramids and burial places of the Inca's ancestors. Hoping to find the buried treasure of former Kings, they plundered pyramids and ancient burial grounds up and down the coast of Peru. Historians have recently found early colonial documents requesting formal permits from the Spanish crown to "mine" pyramids for gold. And mine them they did--teams of hundreds of forced laborers were used to tunnel into these structures. The scars of 16th and 17th century looting can still be seen at many coastal sites today. In the Moche valley on the north coast of Peru, a particularly determined group of "miners" in search of gold even diverted a river to cut into the center of a large pyramid.

The tradition of grave robbing, which began during the early colonial period, unfortunately has continued for centuries in Peru. "Huaqueros" as they are commonly known today, are professional grave robbers, many of whom make a lifetime career of digging up ancient graves and selling the artifacts. Although the looting and destruction of archaeological sites is strictly prohibited by law in Peru, the limited resources of police and local government officials are simply not sufficient to control the activity. Realizing the importance of preserving and studying its rich pre-Columbian heritage, the

Peruvian government actively supports archaeological research, both by Peruvian and foreign scholars. Such research is gradually bringing to light a long and fascinating sequence of pre-Columbian cultural development.

Reconstructing the Past

Peruvian archaeology traces its roots to the late nineteenth century, when archaeologists began making the first systematic attempts to reconstruct the prehistory of the region. Many of these early excavations focused on coastal Peruvian sites because of the exceptional preservation of perishable materials. The coast of Peru is one of the driest deserts in the world, receiving measurable rainfall only on rare occasions. Such dry conditions make for excellent preservation of plant remains, textiles, and wooden objects--things rarely encountered by archaeologists working in other areas of the world. Bodies buried in the hot, dry sand become naturally mummified, providing physical anthropologists like myself with rare glimpses of details such as ancient hair styles and body decoration (a number of tattooed mummies are known from coastal Peru). I will never forget a naturally mummified dog I helped excavate at an archaeological site on the North Coast several years ago. Some time around A.D. 1300, the dog's owner had carefully wrapped the pet in a cloth shroud and buried it outside the wall of a desert city. Seven hundred years later when we unwrapped the shroud, the dog was perfectly preserved, with ears standing straight up and lips drawn back in a permanent snarl.

Despite the destruction of many pre-Columbian cemeteries by artifact hunters, physical anthropologists have been able to make some important discoveries about the physical characteristics of ancient Peruvians, both by studying skeletal material left behind by grave robbers, and increasingly in recent years, by working side by side with archaeologists conducting scientific excavations. Over the past seven years, I have been fortunate to participate in the excavation of several important Moche sites along Peru's North Coast. Previous skeletal studies have characteristically focussed on only a few isolated sites. Through my study of the skeletal remains, it has been possible to

acquire large collections that permit us for the first time to make observations of Moche health, diseases, and demography on a population level.

Physical Anthropology of the Moche

Until recently, the physical characteristics of the Moche people were known to us primarily through the way they depicted themselves in ceramic sculpture and painted murals. Their physical remains had received surprisingly little attention by physical anthropologists. Part of my recent research has concentrated on the study of Moche skeletal remains recovered over the past five years from excavations and surface collections at the site of Pacatnamu (pronounced Pah-caht-nah-moo), a major pre-Columbian ceremonial center. These collections, which are now housed in a research facility in Trujillo, Peru, constitute the largest sample of well-documented human skeletal remains ever recovered from the Peruvian North Coast and are, therefore, a valuable resource both for the study of physical variation among prehistoric coastal populations, and for understanding patterns of health and disease among ancient Andean peoples.

The Pacatnamu Skeletons

The Moche skeletal collections from Pacatnamu pertain to the final phase of the Moche Kingdom (Moche V), and date to approximately A.D. 500-750. The skeletal sample we have recovered to date is comprised of 65 burials excavated from a single cemetery, 26 burials encountered in other parts of the site, and surface collections (approximately 590 specimens) made from three large Moche cemeteries recently damaged by looters.

Life Expectancy in Moche Times

In both the large surface-collected sample and the smaller number of individuals recovered from Moche tombs at Pacatnamu, males and females were present in about equal numbers. Although individuals of all ages, from children to people over 50, were represented, skeletal remains of infants and young children were rare in the surface collections and infants were under-

(continued on p.14)

SUMMER FIELDWORK OPPORTUNITIES

If you are looking for adventure and an opportunity to acquire new knowledge and skills, become a member of an archeological excavation team or a scientific expedition in the United States or abroad. Several of the organizations listed below offer special programs for teachers and junior and senior high school students. Many other programs take young people 16 years of age or older.

Fieldwork opportunities may be available to you even within your own community. Anthropology departments of local universities and colleges, state historic preservation offices, and state archeological societies often engage in local archeological excavations and frequently accept volunteers with no previous fieldwork experience. The Archaeological Institute of America (AIA) offers a listing of state archeologists associated with the national organization as part of its yearly field school listing for the U.S. and abroad (\$10.50 for members, \$12.50 for non-members). Write: AIA, 675 Commonwealth Ave., Boston, MA 02215, or call 617-353-9361. *Archaeology* magazine, published by the AIA, features an archeology travel guide to sites open to the public in the Old World (March/April issue) and the New World (May/June issue). A field school listing is also available from the American Anthropological Association for \$4.50 for members and \$6.00 for non-members. Write: AAA, 1703 New Hampshire Ave., N.W., Washington, D.C. 20009 or call (202) 232-8800.

For a comprehensive listing of fieldwork opportunities in the Washington, D.C. metropolitan area, the Smithsonian Institution's Department of Anthropology distributes "A Guide to Resources on Local Archeology and Indian History" includes a listing of museums and organizations, anthropological and archeological societies, fieldwork opportunities, and a list of professionals involved in local archeology and Indian history. For a copy of this free Guide, write: Public Information Office, Department of Anthropology, Smithsonian Institution, Washington, D.C. 20560; or call (202) 357-1592.

The Smithsonian Institution offers five-week High School Summer Internships to 40 graduating seniors interested in careers in archeology, art, biology, carpentry, history, photography, or vehicle maintenance. Session I runs from June 3 to July 7; session II from July 8 to August 11. Forty graduates will be selected, and interns will receive a \$550 living allowance. Housing and transportation to and from Washington, D.C. is provided. Application packets must be requested no later than March 9 and be postmarked no later than March 16. Write: Intern '90, Arts and Industries Bldg., Room 1163, Smithsonian Institution, Washington, D.C. 20560 or call Julia Langdon at (202) 357-3049.

A National Seminar for Teachers titled "Teaching Writing Using Museum and Other Community Resources" will be offered (July 10-19) by the Smithsonian Institution for elementary and secondary teachers living more than 75 miles outside Washington, D.C. The course carries graduate credit from the University of Virginia, and tuition and fees will total approximately \$325. In addition to learning about ways to use local museum exhibits and such diverse resources as cemeteries and houses as tools for teaching writing, participants will interview several Smithsonian staff writers to learn various approaches to writing. Applications must be postmarked by March 30. For more information and an application, write: National Seminars, Office of Elementary and Secondary Education, Arts & Industries Bldg., Room 1163, Smithsonian Institution, Washington, DC 20560; or call (202) 357-3049 or (202) 357-1696 (TDD).

(continued on next page)



The Office of Elementary and Secondary Education also offers ten week-long seminars on a variety of topics for Maryland, District of Columbia, and Virginia teachers K-12, who want in-service credit. For more information, call Clare Cuddy at (202) 357-2404 for a registration form after May 1. For information on other Smithsonian summer workshops, call the National Zoo at (202) 673-4837 and the National Air and Space Museum at (202) 786-2106.

The National Endowment for the Humanities offers summer projects and seminars for elementary and secondary teachers; some of the topics are anthropology related. For information on the program "Humanities Instruction in Elementary and Secondary Schools," write: NEH Division of Education Programs, Room 302, 1100 Pennsylvania Ave., N.W., Washington, D.C. 20506, or call (202) 786-0377. Application deadline is March 15. For information on summer seminars, write: NEH, Division of Fellowships and Seminars, Room 316, 1100 Pennsylvania Ave., N.W., Washington, D.C. 20506, or call (202) 786-0463. Application deadline is March 1.

There are several organizations that offer volunteer public participation in worldwide research expeditions in various scientific disciplines. Many of these organizations, listed below, are non-profit and donations can be treated as tax-deductible contributions.

University Research Expeditions Program
University of California, Desk K-15,
Berkeley, CA 94720
(415) 642-6586.

Earthwatch
680 Mount Auburn St., Box 403,
Watertown, MA 02172.
(617) 926-8200
(Earthwatch has a special scholarship program for teachers.)

International Research Expeditions
140 University Dr.
Menlo Park, CA 94024
(415) 323-4228

Foundation for Field Research
787 South Grade Rd.

Alpine, CA 92001-0020
(619) 445-9264

CEDAM International
(CEDAM stands for Conservation, Education, Diving, Archeology, Museums)
Fox Road
Croton-on-Hudson, NY 10520
(914) 271-5365

Below is a selected list of organizations that offer fieldwork experience in the United States and abroad:

British Archaeology, sponsored by The Association for Cultural Exchange of Cambridge, England, offers a four-week (July 2-23) comprehensive introduction to British prehistory, including lectures at Christ's College, Cambridge; tours of major archeological sites; and archeological excavation. Inquire about scholarships and academic credit. Application deadline is April 1. Write or call: British Archaeology, U.S. Student Program Division, Institute of International Education, 809 United Nations Plaza, NY 10017; (212) 984-5330.

Crow Canyon Archaeological Center is a non-profit institution specializing in Southwestern archeological research and education. The following programs introduce participants to archeological field methods, laboratory techniques, and excavation. The Adult Research Seminars, consisting of week-long sessions, are conducted from May 27 to October 13. Transferable college credit is available. The High School Field School, also offering transferable credit, takes place from July 1 to 28; applications should be ailed in ASAP. The Teachers' Workshop, conducted from August 4-12, offers three-hours of graduate credit. Write or call: Crow Canyon Archaeological Center, 23390 County Road K, Cortez, CO 81321; (800) 422-8975, (303) 565-8975.

A Teacher Institute: Colorado Plains Indians and Their Neighbors, sponsored by the Denver Art Museum and Denver Museum and Natural History, is scheduled on June 25-29. The course consists of lectures by scholars, participatory experiences, small group workshops and demonstrations, and panel discussions. Undergraduate credit (recertification) is available through the University of Colorado at Denver. Some

scholarships are available. For more information, call Gretchen Diner Johnson (Denver Art Museum) at (303) 575-2009 or Peggy Millett Zemach (Denver Museum of Natural History) at (303) 370-6321 or Jan Jacobs or Lisa Harjo (Denver Indian Center) at (303) 936-2688.

Human Origins and Prehistory in Kenya: The Koobi Fora Field School, offered by Harvard University Summer School and the National Museums of Kenya, introduces the wealth of paleoanthropological evidence at Koobi Fora and field methods in early man research. The field school consists of two six-week training sessions (June 7-July 18 and July 25-September 4). Write or call: Dr. Harry V. Merrick, Koobi Fora Field School, Harvard Summer School, 20 Garden St., Cambridge, MA 02138; (203) 481-0674, or (617) 495-2921 (Harvard University Summer School office).

Cahokia Mounds Field School (July 9-20), sponsored by Southern Illinois University, will excavate the central plaza. This field season will involve remote sensing and coring. For more information, write or call George Holley, Ph.D, Contract Archeology Program, Box 1451, Southern Illinois University, Edwardsville, IL 62026; (618) 692-2059.

The Institute for Minnesota Archaeology (IMA) is offering a four-day Teacher's Workshop in Archaeology, June 11-14, in Pine City, Minnesota. Teachers will work with IMA archaeologists and educators to develop units on archaeology. Registration limited to 15 teachers on first come, first served basis. Write: Teacher's Workshop, Institute for Minnesota Archaeology, 3300 University Ave., S.E., Suite 202, Minneapolis, MN 55414, or call (612) 623-0299.

Parsons School of Design offers two anthropology-related programs this summer for students and teachers: Paleolithic Art and Archaeology of the Dordogne and Parsons in West Africa. For more information, write or call: Parsons School of Design, Office of Special Programs, 66 Fifth Avenue, New York, NY 10011; (212) 741-8975. Early application is advised.

Center for American Archeology, Kampsville Archeological Center conducts educational research programs for junior

and senior high school students, college students and the non-professional, and separate workshops for teachers. Write: Admissions Office, Kampsville Archeological Center, Kampsville, IL 62053, or call (618) 653-4316.

Northwestern University's Ethnographic Field School (June 18-August 11) offers students of all disciplines an opportunity to experience another culture. Students design their own independent research project to learn about the Navajo or Hispanic cultures in New Mexico and Arizona. Write or call: Department of Anthropology, Northwestern University, Evanston, IL 60201; (312) 491-5402 or Professor Oswald Werner at (312) 328-4012, evenings.

Science Museums of Charlotte, Inc. sponsors Field Archaeology in San Salvador, Bahamas. Join in the excavation of a Lucayan Indian site dating to the time of Columbus that last year yielded Indian and European artifacts. Four one-week field sessions beginning June 23 through July 21. Registration deadline is April 30. Write or call: Jerry Reynolds, Discovery Place, 301 North Tryon St., Charlotte, NC 28202; (704) 372-6261.

Smithsonian Research Expeditions offers an opportunity to work for two weeks alongside a Smithsonian researcher or curator as a member of a research team. Two-week anthropology-related projects include excavating a former Caribbean sugar plantation (three two-week sessions in July), organizing the Natural History Museum's large zooarchaeology collection (June 6-16), and reconstructing colonial ceramic artifacts (two sessions in August). Seven full scholarships are available for teachers and college students. For further information, write or call Smithsonian Research Expeditions, 490 L'Enfant Plaza, S.W., Suite 4210, Washington, DC 22024; (202) 357-1350.

Smithsonian National Associates Study Tours and Seminars offers travel opportunities around the world. The following are some anthropology-related programs: Southwest Indians (May 24-June 3; August 23-September 2), Pueblo Indians/Santa Fe (July 14-22), Zimbabwe &

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Teacher's Corner: Choosing Texts for Global History or World Civilization Courses

If you are selecting a textbook for next year's world civilizations, global history, or global studies course, what basic questions should you ask? What issues are important? We are teaching these courses not only for knowledge about our world, but also because more and more of our students will meet people from different cultural backgrounds. If those encounters will bring understanding, not hostility, then what they learn in our classes must be accurate and teach an appreciation for cultural differences.

The following guide, the first in a series, suggests basic general points anthropologists would encourage you to consider as you evaluate textbooks. Future "Teacher Corners" will pose questions to ask and biases to watch out for in texts on China, Japan, Latin America, India, Africa, and the Middle East.

For this guide, the examples come from: 1) *World Geography Today* by Robert J. Sager, David Helgren, and Saul Israel. N.Y.: Holt, Rinehart, and Winston, 1989. 2) *Global Insights* by James N. Hantula et al. Columbus, Ohio: Merrill Publishing Co, 1988; and 3) *A Global History* by Leften S. Stavrianos et al. Boston: Allyn and Bacon, Inc., 1979. The texts represent respectively a geographical, cultural, and historical approach.

1. Basic Orientation

Who are the writers? the consultants? Each textbook has a particular orientation. The common ones are history, geography, cultural anthropology, sociology, area studies, or an integrated approach. Area

studies often are written by political scientists or have an emphasis on politics. In multi-authored texts, subject emphasis in different chapters may be uneven, with different specialists writing different sections. If historical, is the emphasis on ancient or traditional culture or modern culture? Ideally, it should be balanced. Obviously, it is important for both teachers and students to know the particular orientation of the text.

2. Maps

Do they relate to the text? For example, in *Global Insights*, the text discusses the importance and location of rivers in India and China, but none of the rivers is labeled on the series of maps that follows. Also check to see if the maps are current and accurate.

3. Cultural Differences

The critical question for any textbook describing other cultures is: How are cultural differences explained?

First, does the text acknowledge that differences exist? It should.

Second, are those differences seen as the result of a complex interaction of history, natural resources, economic and political systems, values, religion, geography, and other factors? Some texts are weakened by a simplistic cause and effect analysis. For example, only history accounts

for differences.

Third, are those differences discussed without prejudice? Too often all differences are analyzed in terms of the United States; a voice is adopted of "we" versus "they". *Global History* comes very close to doing just that with a tone of European superiority. The book begins with chapters on "Europe Unites the World,"



TWO POPULAR METHODS OF TEXTBOOK SELECTION.

"Europe Dominates the World," and "Europe's Decline and Triumph." The other areas of the world are studied in light of Europe's scientific and political innovations.

Another possible bias of some texts is to present Europe always in conflict with Third World countries. For example, Europeans are seen as the only colonial aggressors in modern history; colonialism on the part of the U.S., Soviet Union, Japan, or China is ignored. Some texts also present all problems in the Third World as caused by colonial experiences.

Are the behaviors in countries other than Canada, the U.S., and Europe seen as exotic or strange? *Global Insights* occasionally suggests that other countries have dress codes, strange eating habits, and exotic customs of gift-giving as if none exist in the U.S. Do authors really believe that a corporate lawyer in New York or Washington, D.C. can wear anything she likes to the office? Examples that avoid this prejudice include a discussion of the Shang dynasty in China where a question "was inscribed on a polished piece of bone or shell, and heat applied to the bone to make it crack. The shape, arrangement and direction of the cracks were interpreted for the 'Yes' or 'No' answer. Similarly, teacups and palms are 'read' in the United States today for answer to questions about the future" (*Global History*, p. 312). A caption under a picture reads "This [doctor] is using acupuncture anesthesia. This form of anesthesia has sparked much interest among doctors in the United States and Europe" (p. 365). In explaining a culture trait, *World Geography Today* notes that "a typical American teenager eats dinner with a knife, fork, and spoon. However, a typical Chinese teenager eats with chopsticks, and Malaysian teenagers are comfortable eating with their fingers. Nonetheless, each trait is considered the best method in its own culture" (p. 87).

An imbalance between urban and rural life is another possible bias. In addition, a text should not have people from a particular country or even continent, for that matter, presented as the same throughout the country. Similarly, differences may be seen only in monolithic terms such as Christians versus Moslem areas or a global "East Asia" combining China and Japan. In *Global*

Insights, a sari is supposed to identify a person from India, yet clothing of Indian women differs greatly by region.

Another problem is that differences may be seen as existing only in the past. *Global Insights* implies that if people from China, Japan, and Africa had different histories all those people would be just like us. If only the British had never entered the picture, the Chinese (and the Africans—who are treated as if they are all the same) would be like the Americans. This suggests that there are no substantive differences in values among peoples of the world. Does a balance exist between the views of outsiders and insiders. For example, *Global Insights* uses primary source material including some written by natives of the region under discussion. In the section on India, for example, the quotations are extremely well-balanced including observations by both native and outside scholars.

In spite of the emphasis so far on understanding cultural differences, a multicultural text should not only emphasize differences. Any student should come away from her reading able to answer just how the other peoples differ from Americans and how they are the same.

Alison Brooks
JoAnne Lanouette

NATIONAL SEMINAR ON WOMEN AND MUSEUMS

During Women's History Month, the Smithsonian Institution will sponsor the seminar "Gender Perspectives: The Impact of Women on Museums," on March 8-10. Based on their research and professional experiences, men and women will present their views on scholarship, education, and communication and on the impact gender has made in these areas. For more information, write or call Artemis Zenetou, Seminar Coordinator, Arts & Industries Building., Room 2225, Smithsonian Institution, Washington, D.C. 20560; (202) 357-1331.

ANTHROPOLOGICAL LINGUISTS AID IN CULTURAL SURVIVAL

[Editor's Note: The following two articles are written by anthropological linguists who have gone beyond the traditional work of accumulating vocabularies and grammars to bringing their linguistic expertise back to the native American speakers whose languages they have studied. Dr. Robert Laughlin and Dr. Kathleen Bragdon describe, respectively, their work with a Mayan community in Chiapas, Mexico and the Passamaquoddy of Maine.]

ME AND SNA JTZ'IBAJOM (The House of the Writer)

My work with the Mayan Indians of Chiapas in southern Mexico began in 1959. I was a member of the Harvard Chiapas Project, whose goal was to document culture change in a Mayan community. There I met Romin Teratol, a Tzotzil Mayan Indian who was employed as a puppeteer of the National Indian Institute (INI). My wife and I moved briefly into his mother's second house and began learning his language. My predecessor in the project, Lore Colby, had typed up a provisional dictionary, but it was just a start. Soon I was collecting folk tales and thereby adding vocabulary to the dictionary. Then I collected dreams. However, when I suggested the possibility of publishing those dreams, I was advised that I should be able to analyze them according to Freud, Jung, and who knows who else. So I decided it would be easier to compile a thorough dictionary. This process took the next 14 years, and in 1975 *The Great Tzotzil Dictionary of San Lorenzo Zinacantán* was published. The following year I published *Of Shoes and Ships and Sealing Wax: Sundries from Zinacantán*, based on the journals of Romin and his neighbor, Antzelmo Peres, who had become my collaborators. They had twice travelled to the States to finish our opus and offer a description of life in another world.

Eventually the collections of folk tales and dreams were published in Tzotzil and English: *Of Cabbages and Kings: Tales from Zinacantán* (1977) and *Of Wonders Wild and New: Dreams from Zinacantán* (1976).

Selections from these have recently been published in *The People of the Bat: Tales and Dreams from Zinacantán* (1988), Carol Karasik (ed.). My most recent publication, *The Great Tzotzil Dictionary of Santo Domingo Zinacantán* (1989), is a translation and reordering of a 16th century Spanish-Tzotzil dictionary that I found in my home town of Princeton in 1974.

In 1982, aided by the Mayan poet, Jaime Sabines, brother to the governor of Chiapas, Mexico, a group of Tzotzil Mayan Indians who had worked with me or with anthropology colleagues over many years secured funding for a writers' cooperative and published two bilingual booklets. However, the governor's term was ending, and, lacking further support, this light was permanently cut. I was then approached by the late Romin's son, Xun, by Antzelmo Peres, and by Maryan Lopis Mentés of neighboring Chamula, whom I had known for many years. I had hoped, during the many years of my anthropological and linguistic research, that



somehow my work might return to Zinacantán. I saw this as an opportunity --an opportunity to help bring Mayan literacy to Chiapas.

By chance, a conference that same year celebrating "40 years of Anthropological Research in Chiapas" was scheduled to begin. I urged my Mayan friends to address the many assembled anthropologists and linguists. This they did, explaining, "You have awakened our interest in our own culture, you have published many studies, but always in other countries where we never see the results. Our young people are now literate in Spanish and think they are very smart, but they don't know a quarter of what their fathers know. We would like, at least, to put on paper our customs for the sake of our children and grandchildren."

The next few years, aided by Cultural Survival, a human rights non-profit organization, we founded Sna Jtz'ibajom, a Tzotzil-Tzeltal writers' cooperative.

Currently the cooperative publishes bilingual booklets in two Mayan languages; these booklets cover history, oral history, and customs. The cooperative has also established a puppet theater, a live theater, and a weekly Tzotzil-Tzeltal radio program. The puppet theater draws on folk tales, but also presents didactic skits on alcoholism, medicine, and bilingual education. The live theater has dramatized a folk tale and created a family planning play.

The cooperative also has started a Tzotzil literacy project. Initially I contacted two religious scribes and a secretary of the school committee of Zinacantán to teach. Currently the teachers (who have never been teachers before, and hence, have not been taught to scorn their own culture), give two hour classes in Tzotzil twice a week in their own homes to 10-12 of their neighbors. The interest in the project was so great that one teacher requested to teach overtime.

Those eligible to participate in the literacy program must already be minimally literate in Spanish. Initially there was some discussion as to whether women should be allowed to take classes. The idea of women and men spending time together in the evening at first made many feel

uncomfortable. One prospective student thought that learning Tzotzil would enable him and his girlfriend to write secret messages to each other since his father only knew Spanish. In two years, the project has awarded 500 diplomas to men, women, and children in two communities. Presently we have two directors, 14 teachers, and 144 students enrolled each semester. Although Tzotzil is not the government or official language, that has not discouraged the Mayans' enrollment in the evening language classes. Students are encouraged to record personal and family histories as well as to produce creative writing. Stories are reviewed and edited by Sna Jtz'ibajom. The federal publisher has agreed to print 3,000 copies of each work submitted by the cooperative. Students give the following reasons for learning Tzotzil: to improve their Spanish by working with translations, to learn, to become smarter, and to appreciate their own tradition.

Besides the personal enrichment the students receive from learning to read and write their native language, the Mayan society also benefits through the national and international recognition the cooperative is receiving. The cooperative's success has been due in part to the talent of its members as writers, actors, artists, and/or teachers, and also to the great pride that the people have in their culture and their new desire to be literate in their mother tongue, to "become smart."

We have already come a long way since our beginning eight years ago. We next would like to see the establishment of culture centers in each community, linked to a Mayan Academy of Letters based in San Cristóbal, where teachers could be trained to spread our activities throughout the Mayan areas of the state.

My first responsibility to the cooperative as an anthropological linguist has been to train its members how to write their language correctly. While spelling is quickly learned, the decision as to where words begin and end is a problem even for linguists. For example, should the particles to and ox, when they occur together, be kept separate or merged?

Second, the economic crisis in Mexico, severely restricting government funding,

combined with the lack of a tradition of charitable giving in Mexico, forces the cooperative to look outside for support. Very few foundations grant internationally, and of those a very small number support cultural projects. Even then, support is limited to two to three years, so it is difficult to plan for the future. I have been able thus far to steer the cooperative to appropriate foundations. For a weaving cooperative, self-sufficiency may be possible, but for writers?

As a member of Sna Jtz'ibajom, I see the significance of the project as strengthening the Mayan culture for the Mayans themselves and offering an alternative to the non-Mayan media barrage. Just as important, the cooperative is awakening an interest among non-Indian Mexicans in their Indian heritage and informing the outside world that Mayan culture is alive and flourishing.

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AN ANTHROPOLOGICAL LINGUIST LOOKS AT PASSAMAQUODDY

The mist was rising off the inlet, the tall spiky outlines of the weirs just visible through the haze, as I drove for the first time into the small Passamaquoddy Indian reservation at Pleasant Point, near Perry, Maine. The reservation is spread out in a sinuous pattern, running along the shore of the inlet, and ending short of a narrow isthmus that bears the road running towards Eastport, a fishing/resort community on the coast. The conspicuous landmarks of the community include the Wabanaki Mall, where signs for the restaurant, auto repair shop (now closed) and grocery store are in Passamaquoddy and English, the native-run supermarket, and the Passamaquoddy Museum, home of the Passamaquoddy Bilingual-Bicultural Program.

I have come to begin a study of the Passamaquoddy-Maliseet language. Passamaquoddy is a language of the eastern sub-group of the Algonquian

language family. I am already familiar with a related language, Massachusett, which I have studied with Dr. Ives Goddard, with whom I co-authored *Native Writings in Massachusett*. Massachusett, however, is an extinct language, and what is known about it comes from writings left by native speakers who became literate in their native language in the seventeenth and eighteenth centuries. My plan is to study Passamaquoddy and thereby to familiarize myself



with a living Algonquian language, for the comparisons it will make possible with Massachusett, and for the insights it will give me into language use. For instance, do people within the community use Passamaquoddy in formal as well as informal situations and does speech differ among different age groups?

At the Wabanaki Mall, shoppers and employees speak softly in Passamaquoddy. I catch perhaps one word in five. Fortunately for me, all speak English as well. I purchase a basket and ask about the maker, a woman still living at Pleasant Point and well known for her skill. I am then directed to the Passamaquoddy Museum to meet Joseph Nicolas and David Francis, two Passamaquoddy men who have

been most influential in sustaining the Bilingual-Bicultural program at Pleasant Point.

Both men are articulate about the needs of their community and their concern for the preservation of the Passamaquoddy language. Both spend much of their time creating and editing materials for school use, taping stories, and working on translations. The museum, the center of the Title-Four funded educational program, consists of two rooms filled with displays of baskets and other objects, as well as murals and life-sized models dressed in traditional clothing.

As a newcomer to Pleasant Point, I am more a receiver of knowledge than a giver. Both here and at Peter Dana Point, where Wayne Newell oversees the vigorous sister program, materials traditionally supplied by the linguist, such as dictionaries, grammars, and translations, have been begun or completed by community members, with the occasional assistance of other linguists and educators such as Phillip LeSourd, Robert Leavitt, and Carl Teeter. Here, as elsewhere in native communities across the United States and Canada, the people are beginning to take a more active role in generating information, and in making important decisions for the future, about their language and culture.

As an outside observer, it is this native involvement that I can perhaps describe and analyze as a community member could not. In pursuit of such understanding, I have begun to interview various community members about their use of and feelings about their native language. These interviews, in combination with well-established ethnographic techniques of field observation, allow me, even as a novice in the language, some insight into the way Passamaquoddy is being used, by whom, and for what reasons.

Fortunately, I encounter little resistance and hostility. The people of Pleasant Point and Peter Dana Point are proud of their language, proud of the fluency of their leaders and elders, and proud to discuss and describe their language to an outsider. As a beginner, I am dependent on them for information, which they generously supply. Their attitude greatly encourages my study and creates enjoyable working conditions.

As the work of a number of modern sociolinguists has shown us, language preservation is not simply a question of recording texts, or creating grammars and dictionaries, but of working to create and foster natural (as opposed to formal teaching) situations in which the native language can be used (for example, teaching basket making or revitalizing fishing and hunting skills). In other words, language preservation can encourage social contexts in which the native language has a legitimate and valued place. Here, comparative information, derived from studies like mine of languages that did not survive, is important, as is the information from other successful language preservation programs in other contemporary native communities.

Yet all of this is in vain if the people of the community cannot or do not wish to make the enormous commitment to sustained preservation programs that is required. Among the biggest problems facing the Passamaquoddy and others like them today is the conflict between their increasingly strong desire for language and culture preservation, and their need to provide relevant education, job training, and an acceptable standard of living for community members, especially the young. In Pleasant Point today, the percentage of people under 30 who are fluent speakers of the language is declining, and young parents are not using the language with their children. Although native language classes are held in the elementary schools, these classes are seen by the children as having little relevance to their daily lives. There is relatively little published material in Passamaquoddy, and all technical and advanced educational literature is in English. Studies elsewhere have shown that only when native students are "immersed" in the language, and only where all official agencies provide truly bilingual services will the language have any hope of survival.

Leaders of the Bilingual-Bicultural program at Pleasant Point and Peter Dana Point are aware of this and are actively searching for new ways to involve the community in the language preservation effort. Some options to provide natural contexts for native language use include native language newspapers, closed-circuit native-language television shows, and the encouragement of

traditional subsistence and manufacturing skills. The use of Passamaquoddy in newly composed songs, poetry, and literature offers another intriguing avenue of potential involvement.

As an anthropological linguist, I have found the efforts of the Passamaquoddy communities fascinating and informative. I now have a deeper understanding of the relationship between anthropology and education and of what makes a successful bilingual cultural program, information I am sharing with colleagues.

In an era where native people are becoming increasingly active in disseminating information about their own languages and cultures, the work of anthropologists and linguists takes on a different kind of significance. Scholars are now being called on to witness a revitalization of native awareness of their languages, and in many cases to assist native-run programs of language preservation. It is a great privilege to be allowed to observe and to assist in such efforts.

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NEW PUBLICATION

Anthropology and Education is a new international newsletter published bi-annually. It is designed to promote archaeological education by creating a network among archaeologists, classroom and museum educators, and historical agencies. Each issue will focus on a theme and will include articles, teaching strategies, and upcoming events and publications on prehistoric, historic, underwater, industrial, and classical archaeology. A \$5.00 subscription fee covers mailing costs. If you would like to subscribe or contribute to the newsletter, please write to the following address:

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("Summer Opportunities" cont'd. from p.6)

Botswana (May 8-25), India Arts and Crafts (March 7-April 3), Caves and Castles (Dordogne, France)(June 16-29). Write or call: Smithsonian National Associates Study Tours and Seminars, 1100 Jefferson Dr., Room 3045, Washington, DC 20560; (202) 357-4700.

Archaeological Rescue Inc., a nonprofit educational organization in affiliation with the Anthropology and Education Sections of the Milwaukee Public Museum, is conducting field schools during the summer months at Sheboygan Marsh in Sheboygan County, Wisconsin where there is evidence of human occupation dating to 8000 B.C. From June 18 through August, one- and two-week and daily sessions are available with special sessions scheduled for educators, students, families, and adults. Registration fee includes meals, primitive lodging, equipment, and laboratory supplies. No experience is necessary. For more information, call (414) 352-2515.

Southwestern Archaeology Workshop for Teachers (June 6 to July 6), sponsored by the Anthropology Department, Northern Arizona University, is an introductory level course for teachers who want to include archeology in their curriculum. Includes excavation at Elden Pueblo (an 11th-13th century Sinagua site near Flagstaff) and trips to various archeological sites. In addition, the Elden Pueblo Project sponsors several public programs such as week-long day camps for 4th to 6th graders and 7th to 9th graders, Arizona Archaeological Society (amateurs) certification programs, and the Family Camp Excavation Program. For more information on the teacher workshop and on the various public programs, write or call Dr. Carl Phagan, Anthropology Department, Box 15200, Northern Arizona University, Flagstaff, AZ 86011; (602) 523-3180/7431/3038.

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("Moche" continued from p.3)

represented in the excavated burials. Remains of children are more fragile and preserve less well than bones of adults, although it is possible that not all infants and children were buried in cemetery areas.

In the cemetery, which we excavated completely, the remains of 67 individuals were recovered. Almost a third of these (20) were under 5 years old, while only 4 individuals were represented in the child and adolescent age range (ages 5-19). This age distribution is consistent with the U-shaped mortality curve commonly observed in living human populations, where probability of death is highest during the first year of life, declines during early childhood and adolescence, and climbs sharply again in the adult years. Of the individuals who died after childhood, about one third lived to a mature middle age, dying between 35 and 49 years. But a significantly larger proportion of males (12 out of 23) died as adolescents (15-19 years) and young adults (20-34 years), while the majority of females (12 out of 23) fall into the old adult age class (50+). If this sample is representative of the Moche population at Pacatnamu as a whole, these differences suggest that Moche women had a substantially greater probability of reaching old age than did men. Was this due to greater violence or more hazardous activities among men or to greater susceptibility of males to disease? We do know that the Moche frequently depicted scenes of warfare and the capture and sacrifice of prisoners. However, we have found very little skeletal evidence of fractures or other injuries in the Moche sample from Pacatnamu, making it difficult to attribute earlier mortality in males to warfare.

Physical Characteristics of the Moche People

Based on his early studies of ancient Peruvian skeletons, Aleš Hrdlička of the U.S. National Museum (presently the National Museum of Natural History) described prehistoric peoples of the Peruvian coast as broadheaded (brachycephalic) and of relatively short stature. The Moche population at Pacatnamu conforms well to this description. Living stature calculated from

Moche skeletons for both males (av. 5'3") and females (av. 4'11") is very similar to that of present day North Coast people of Indian origin. The Moche had wide faces and prominent, relatively narrow noses. Approximately half of the Moche skulls we studied show artificial cranial deformation. This deformation varies from a mild to pronounced flattening of the back of the skull, with flattening of the forehead region occasionally visible as well. Broadening of the cranial vault and slight broadening of the cheeks are noticeable in most deformed skulls, although I believe the deformation we see was probably the unintentional result of infant cradle-boarding rather than a conscious attempt by the Moche to alter the shape of the head. No depictions of infants in cradleboards are known from Moche art, nor have physical remains of cradleboards been found in a Moche context, perhaps because of poor organic preservation. However, well-preserved cradles and cloth bands which were used to fix an infant's head to the cradleboard have been recovered from later coastal cemeteries, along with skulls showing the same form of deformation observed among the Moche at Pacatnamu.

Family Cemeteries

One preliminary but intriguing finding on Moche mortuary practices has come out of my study of skeletons at Pacatnamu. Here, I expected to find one large cemetery where the local population buried their dead, as I had found at other sites in this area. I found, instead, numerous small cemeteries throughout the site and began to investigate answers as to why so many cemeteries were in use during a single time period.

Variation in the morphology of the facial skeleton is known to be a sensitive indicator of population differences, and has been used successfully by physical anthropologists to differentiate ancient populations as well as to identify the population affiliation of recent forensic cases. By applying some of these techniques to Moche skulls at Pacatnamu, I was able to determine that individuals buried in the same cemetery resembled one another (in their facial morphology) more closely than they did individuals buried in other cemeteries of the same time period. Since greater resemblance implies closer genetic

relationship, I interpreted the results as suggesting that the Moche buried their dead by family group. This conforms with the findings of the sixteenth century Spanish Chronicler, Cieza de Leon, who on his travels in 1547 through the valley where Pacatnamu is located, learned that native people buried their dead by kinship group in the hills and bluffs above the valley floor. This, along with the results of my research at Pacatnamu, suggest that burial by family group was a very ancient practice in the valley.

Health and Disease

All the Moche skeletal material excavated or surface collected at Pacatnamu was examined for evidence of disease or nutritional deficiency. Infants and children showed little sign of nutritional stresses due to low protein or insufficient calories, (something which I found in some later burials at the site), and adults were relatively robust. All the older individuals and several younger adults had some degree of arthritis in the joints, particularly in the hips, knees, shoulders, and elbows. In the older adults, arthritis of the temporo-mandibular (jaw) joint was also common. The Moche also suffered from tooth decay and loss; middle-aged adults (35-49) had lost an average of 4.9 teeth and had cavities in an average of 3.6 of the remaining teeth, while old adults over 50 had lost an average of 17.2 teeth. Remaining teeth were frequently affected by periodontal disease. This is consistent with a growing body of data on dental disease among prehistoric agriculturalists, indicating that people who eat diets rich in soft foods and carbohydrates frequently have a high incidence of cavities and other dental disease, even in the absence of refined sugars.

Understanding the Moche: Ongoing Research and Future Prospects

Recent archaeological excavations at sites such as Sipán are rapidly increasing our knowledge about ancient Moche culture. The study of their skeletal remains is providing additional information about their physical characteristics, health, and mortality patterns. The high status tombs found at Sipán pose some new research questions, which we are currently working

to answer. For example: Are there differences in the health, stature, or other physical characteristics of the Moche elite that might reflect a lifestyle and diet different from that of Moche commoners? Do the skeletons of the elite show any rare or unusual skeletal traits that might suggest a lineage of hereditary Moche rulers? Do the skeletons that surround the central occupants of elaborate tombs at Sipán represent retainers or relatives of the deceased?

Ongoing research may provide answers to these and other questions about the population responsible for this remarkable prehistoric South American culture. It may well be that the next generation of school children will be as familiar with the Moche as with the Inca, who dominated the coast of Peru 1,200 years later.

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Anthro Notes

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THE ARCHAEOLOGY OF AFRICAN AMERICAN LIFE

Excavations of slave cabins in the late 1960's marked the beginning of a new and important field known as African American archaeology.

African American archaeology studies the daily lives of past African American communities through the analysis of the tangible material remains recovered from the places where members of these communities once lived and worked. From the careful study of broken pottery, mortar, food bone, tools, buttons, beads, and other objects, archaeologists are able to piece together information on the ways African Americans built their houses, prepared their food, and crafted household equipment and personal possessions.

Archaeologists engaged in this research are ultimately seeking answers to questions such

as: How was an African heritage transplanted, replaced, or reinterpreted in America? In what ways are the recovered artifacts from African American sites the reflection of cultural patterns or of social conditions--poverty and restricted access to material goods? What are the differences in the material lives of slaves, free blacks, and tenant farmers and of African Americans living in urban versus rural communities? How did African Americans survive the rigors of everyday life?

Archaeologists first began to study African Americans as part of a growing scholarly interest emphasizing the history of people who created or left behind few written documents. Enslaved African Americans were generally denied the opportunity to learn reading and writing skills. Even after emancipation, many former slaves, lacking



other alternatives, were forced to return to plantations as wage laborers and land renters, where they remained poor and illiterate. Thus, most written records used to examine the five hundred year history of African Americans are the products of European Americans whose understanding of African American culture was often flawed. Additionally, these records are one-sided as these contain only information that interested the author. For example, slaveowners and plantation managers generally recorded information on slave health, his or her capacity to perform work, and behavior considered deviant. These documents rarely contain descriptions of objects slaves made and used or of other cultural expressions.

The archaeological record is also biased. The archaeologist can only interpret abandoned, discarded, or lost objects preserved in buried deposits. This leaves out any object that may have been kept through the years and handed down from generation to generation or any object made of materials that do not preserve well underground. Moreover, artifacts provide the basis for inferences about particular aspects of behavior, not direct evidence of behavior. Therefore, the interpretation of the material record requires archaeologists to incorporate historical and ethnographic descriptions of behavior derived from written sources and oral tradition.

The Search for an African Heritage: Ceramics, Mud Houses, and Ritual Items

In the archaeological study of African American sites, archaeologists are particularly interested in artifacts suggestive of either an African heritage or of newly created African American traditions. Although the evidence thus far uncovered is fragmentary, and interpretations are tentative, these finds supply empirical data for the widely held view that enslaved Africans and their descendants nurtured and sustained cultural traditions in spite of the oppressive, dehumanizing conditions of slavery. Some of the most convincing evidence that supports the persistence of African heritage includes: slave-made ceramics recovered from plantations in South Carolina and

Virginia; the building of African-style mud-wall houses on 18th century plantations in South Carolina; and ritual paraphernalia of a traditional healer recovered from a cabin in Texas occupied during and after slavery.

The most frequently recovered artifacts produced by African Americans are ceramics used for preparing, serving, and storing food. So far, ceramics produced by African Americans have been recovered from numerous sites in South Carolina, Virginia, and several islands in the Caribbean. In the southern United States, these ceramics called "colonoware" are low-fired, unglazed earthenware that resemble traditional pottery produced by Native Americans. Until the past decade, archaeologists thought that only Native Americans had produced colonoware, and it still seems likely that Indians created certain European-styled vessels such as shallow plates and bowls with ring feet that English settlers would have valued. But now most scholars agree that African slaves produced a special variety of this handbuilt pottery, particularly the rounded forms, because much of it has been found at sites that date long after the demise of local Indians.

In South Carolina, the first real clue that African Americans made their own pottery came when fragments turned up that appeared to have been fired on the premises of Drayton Hall, a plantation located west of Charleston, South Carolina. Colonoware often comprises 80 to 90 percent of the ceramics found at sites occupied by slaves in the 1700's. Further research by Leland Ferguson, an historical archaeologist at the University of South Carolina, has shown that some of the South Carolina forms resemble pottery still made in parts of West Africa today. More recently, he has identified markings on some pottery fragments that are similar to the cosmograms used in the traditional rituals of peoples in the Congo-Angolan region of Africa. Cosmograms symbolize the way a society perceives the universe. The markings consist of a cross enclosed in a circle, which represents the daily course of the sun and the continuity of life: birth, death, and rebirth.

Why is evidence of pottery making among enslaved African Americans important? The use of this pottery suggests that enslaved African Americans prepared food to suit their own taste, perhaps incorporating aspects of traditional African cuisines. Additionally, slaves also used these ceramics to prepare food for their masters, as colonoware accounts for a significant portion--sometimes more than half--of the ceramics used in planter households. This suggests that culinary techniques used by slaves influenced local southern white cuisine as well.

Excavations at the sites of Curriboo and Yaughan, two former indigo plantations in Berkeley County, South Carolina, revealed what may have been rectangular African-style houses designed and built by slaves. These slave quarters consisted of mud walls, presumably covered with thatched palmetto leaves, similar to thatched roof houses in many parts of Africa. Although no standing walls exist, archaeologists have found wall trenches containing a mortar-like clay. The presence of numerous pits, apparently used to extract clay, found throughout the sites, further suggests the use of clay as the primary construction material.

Since this discovery, a careful examination of written records has revealed several scattered references to slave-built, mud-walled structures. Indeed, previously unnoticed written descriptions seem to suggest that these African-style houses may have been commonplace. W.E.B. DuBois offered a description of palmetto-leaf construction in his 1908 survey of African and African-American houses. "The dwellings of slaves were palmetto huts," he wrote, "built by themselves of stakes and poles, with the palmetto leaf. The door, when they had any, was generally of the same materials, sometimes boards found on the beach. They had no floors, no separate apartments."

The mud houses at Curriboo and Yaughan plantation were built and occupied between 1740 and 1790. They were abandoned and replaced with European-American style framed dwellings in the early 1800's. This change in housing styles coincided with a period when many European Americans

came to view anything African as backward and inferior, and in the case of housing, unhealthy. As a result, many slave-holders began to impose their standards of appropriate housing upon slaves.

At the Jordan Plantation, approximately 60 miles south of the modern city of Houston, Texas, archaeologist Kenneth Brown uncovered an assemblage of artifacts apparently used in healing and divination rituals. The Jordan plantation operated as a slave-worked plantation from 1848 until emancipation, and continued with wage laborers, many of whom were former slaves of the plantation, until 1890. Nine cabins were excavated and the materials from several individual cabins revealed evidence of the specialized activities of a carpenter, seamstress, cattle herder (cowboy), and of a shaman/healer. The materials from the shaman's cabin consisted of the bases from cast iron kettles, pieces of utilized chalk, fragments of a small scale, bird skulls, animals paw, medicine bottles, ocean shells, doll parts, spoons, nails, knives, and chert scarpers. Many of these objects could have functioned in other activities and most likely did at various points in their lives. But when the artifacts are taken together, they suggest some form of ritual use. Support for this thesis comes from abundant ethnographic studies conducted in the Caribbean and parts of Africa that describe the use of wooden or metal trays, white chalk or powder, metal staffs, bird symbolism, and other objects used in healing rituals.

The assemblage of artifacts from the Jordan Plantation presents an excellent example of African Americans using mass-produced and reworked objects for a special African American meaning. Another example of the special use of manufactured objects is the occurrence of colored glass beads, particularly blue beads, that are found on slave sites throughout the south from Virginia to Texas. William Adams, an archaeologist at Oregon State University recently suggested that blue beads may be related to a widespread belief in the Moslem world, including parts of Africa, that a single blue bead worn or shown on clothing protected the wearer against the Evil Eye. Undoubtedly, other artifacts uncovered

from African American sites have been ignored by archaeologists who have been unable to decipher the special function certain objects occupied in African American culture.

Archaeological Evidence of Free and Freed African American Communities

Slave sites, the primary focus of African American archaeology, sometimes contain deposits that date after emancipation. Plantation sites containing deposits dating from before and after emancipation often reflect continuity from slave to free labor as was the case at the Jordan Plantation. However, a wide variety of African American sites have been studied; in fact, archaeological investigations at African American sites have been undertaken in at least 30 states, Canada, and several Caribbean islands. These investigations range from the home sites of well-known, often prominent individuals like Benjamin Banneker, Frederick Douglass, and W.E.B. Dubois, to entire towns such as Allensworth, California and Buxton, Iowa. Archaeologists have also examined African American neighborhoods in several cities and isolated rural settlements. For many of these sites, archaeology is the only source of information that describes the everyday lives of people who once lived at these locations.

Studies of free and freed African American communities have addressed questions similar to those of slave sites: What were the living conditions and basic material culture of these communities? What aspects of the archaeological record related to ethnic behavior and what aspects to economic and social conditions? Unlike the growing evidence at slave sites for ethnic behavior in ceramic production and use, architecture, and ritual objects, archaeological evidence of ethnicity at non-slave sites varies from site to site and is much more subtle. In some cases, for example at Benjamin Banneker's home site, no evidence of Banneker's ethnicity is revealed from the archaeological record. The assemblage from his 18th century farmstead in rural Maryland was found to be identical to those recovered from sites of European American settlers of similar social and economic status living at the same time

as Banneker. This degree of assimilation may characterize many other free African Americans living during the time of slavery who owned property and enjoyed a material life beyond bare necessities. However, bound by race, free blacks occupied a tenuous position, where they were at the constant mercy of whites, regardless of their material wealth.

Comparison between poor African Americans and poor European Americans suggests a similar pattern. Archaeology at Millwood, a plantation worked by tenant farmers and wage laborers from 1865 to 1925, revealed that the quality of material life was not based upon ethnicity or race but upon one's position in the plantation hierarchy. Archaeologist Charles Orser identified five classes of occupants living on the plantation (landlord, millwright, tenant, servant, and wage laborer), and observed that blacks and whites of the same class experienced similar material conditions.

Archaeological studies of African American neighborhoods in Alexandria, Virginia and Washington, DC suggest that ethnic behavior is most evident in food preferences. In both studies, the archaeological records of the African Americans were compared with those of European Americans of similar economic status. Although subtle differences were evident in purchased ceramics and other artifacts, the most striking difference was found in foodways (encompassing everything from food procurement, preparation, and consumption habits), an aspect of culture that frequently indicates ethnic preferences. The African Americans at both sites consumed much more pork than European Americans and displayed a particular preference for pigs' feet. Floral and faunal analyses indicated that an African American community in Washington also consumed collard greens and opossum.

Archaeology can also be used to examine material conditions associated with special circumstances experienced by African Americans. For example, preliminary work I conducted on sites associated with recently emancipated slaves suggest that ex-slaves along the Georgia coast were, in some cases,

(continued on p.14)

TEACHING RESOURCES

from the National Museum of the American Indian...

Teaching kits for elementary school teachers:

American Indian Dolls, An Educational Resource Kit. \$6.70.

The Great Plains Art Activities. This teaching kit consists of three art activities for middle elementary students. \$2.75.

Artifact guides:

On Your Own With Native American Cultures. (Aztecs, Pomo, Taino, Winnebago, Shoshoni, Eskimo, Mississippians) \$2.75.

On Your Own With Great North American Indians. This guide highlights the lives of great orators and artists (Joseph Brant, Sitting Bull, Crazy Horse, Maria Martinez, Louise Keyser, Chief Joseph, Tecumseh, Geronimo) \$2.75.

Also available are free reading lists on the Northeast Woodlands, Plains, and North America, in general. Write: Publications, National Museum of the American Indian, Broadway at 155th St., New York, NY 10032.

[On November 28, the Museum of the American Indian, Heye Foundation, became the fifteenth museum of the Smithsonian Institution --the National Museum of the American Indian (NMAI). This new museum will be dedicated to the collection, preservation, study, and exhibition of American Indian languages, literature, history, art, and culture, and to significant native American involvement in areas of research and administration. Of the recently

chosen 25-member Board of Trustees, twelve are American Indians. A director for the new museum will be selected by the end of the summer. The NMAI is expected to open in the mid- to late 1990s on the east side of the National Air and Space Museum, located on the Mall.]

from WETA...

The recent Smithsonian World program, "Tales of the Human Dawn," featuring several distinguished paleoanthropologists, is available in video for \$44.95. A teacher's guide providing a background essay, pre- and post-viewing activities, a glossary, and a bibliography can be purchased separately for \$3.00. Write to: WETA, P.O. Box 2626, Washington, DC 20013. Request their free catalog that includes other programs suitable for anthropology teaching.

from NOVA...

Teacher guides (\$3.00 each) and videocassettes and films on Nova programs, for rent or purchase, on such programs as "The Children of Eve," relating to evolutionary biology, and "Buried in Ice," on the mummified remains of arctic explorers. Write to: WGBH, NOVA Teacher's Guide, Box 2222-S90, South Easton, MA 02375. For information on NOVA videocassettes and films, write to: Coronet/MTI Film & Video, 108 Wilmot Rd., Deerfield, IL 60015; 1-800-621-2131. Illinois and Alaska residents call

collect: (312) 940-1260.

from SUNY College, Potsdam...

"Mystery Fossil," (copyright 1989) a Macintosh computer learning exercise for introductory anthropology classes to help students think like paleoanthropologists. The



exercise asks students to determine the species and phylogenetic position of an unknown hominid fossil by comparing it against known fossils. Several views of each fossil are provided with data on its discovery, setting, associated natural and cultural material, dating, and morphology. Required: Macintosh Plus, Macintosh SE (minimum 1 megabyte memory) or Macintosh II; System 4.0 or later. Hypercard version 1.2 or later, Home stack updated for version 1.2, printing resource file and Macintalk system file. Write: "Mystery Fossil," c/o John Omohundro, Anthropology Department, MacVicar Hall, Potsdam C, Potsdam, NY 13676.

from the National Center for Science Education (NCSE)...

brochures-

The Record of Evolution by Eric Delson (American Museum of Natural History); *Origin Myths* by Robert Carneiro (American Museum of Natural History); *Scientific Creationism, Evolution and Race* by Eugenie Scott, NCSE. Single copies are free if a stamped, self-addressed envelope is provided. Additional copies are \$.25 each (\$.20 for 100 or more). [The American Anthropological Association, 1703 New Hampshire Ave., N.W., Washington, D.C. 20009; (202) 232-8800, also has these and other brochures on this topic available for the same cost.]

newsletters-

NCSE Reports. Formerly *Creation/Evolution Newsletter*, this bimonthly publication keeps teachers abreast of developments in the controversy. Subscription \$15 (\$18 outside U.S.).

Five NCSE Committees of Correspondence publish newsletters of their own: California. *BACC Science!* \$5; Iowa. *Iowa Committee of Correspondence Newsletter* \$15; Illinois. *The Pseudo-Science Monitor* \$17; Ohio. *Newsletter of the Ohio Center for Science Education* \$10; and Ontario. *OASIS Newsletter* \$5.

videotape-

"Science Showdown." An entertaining mock debate held at a meeting of the American Association of Physical Anthropologists,

enacting well-known debating mistakes. \$10, 10-day rental. \$20, purchase.

audiotape-

"Only a Theory: Presenting Evolution to the Public." A 1989 symposium at a meeting of the American Association for the Advancement of Science. \$8 (2 tapes).

All of the materials can be ordered from the NCSE, P.O. Box 9477, Berkeley, CA 94709.

[Information from *Teaching Anthropology Newsletter*, no. 15 (Fall 1989). This newsletter is available free of charge by writing: Paul A. Erickson, Editor, TAN, Department of Anthropology, St. Mary's University, Halifax, Nova Scotia B3H 3C3]

In addition, "Creationism: A Teacher's Resource Guide" is available from the Public Information Office, Department of Anthropology, National Museum of Natural History, Smithsonian Institution, Washington, D.C. 20560.

INDIAN EDUCATION CLEARINGHOUSE

The National Indian Education Clearinghouse (NIEC) at Arizona State University is developing a computerized directory of American Indian materials and resources for research and curriculum development for all levels of teaching. The NIEC database will be accessible through school and public libraries. All publications and materials incorporated into the database first will be reviewed by experts in American Indian studies to ensure quality control.

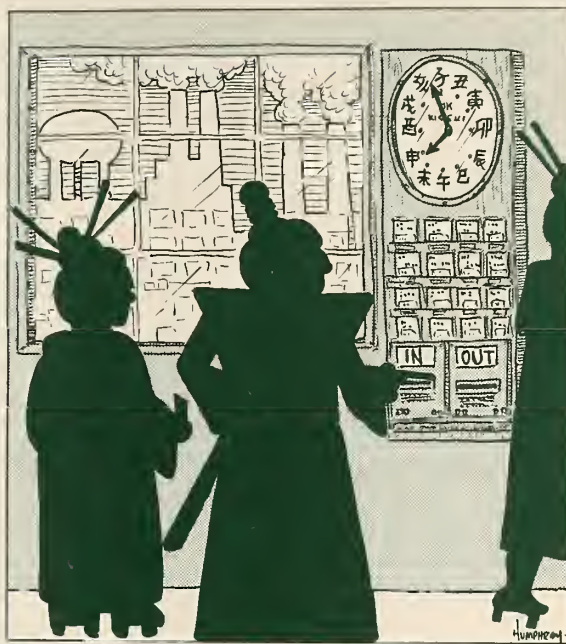
The NIEC seeks good publications and curriculum materials for its database, which they expect to be operational late September 1990. Send three copies of copyrighted American Indian/Alaska Native curriculum materials and one copy of non-copyrighted materials to: Mimi McBride, National Indian Education Clearinghouse, Hayden Library, Room 204, Arizona State University, Tempe, AZ 85287; (602) 965-6490.

Teacher's Corner: Choosing Texts for Studying Japan

Japan is the land of samurai, haiku poetry, flower arrangements, tea ceremonies, and miraculously prosperous companies such as Sony and Mitsubishi. Wrong. All too often, students know only about these seemingly exotic qualities and their studies in global history or world civilization courses simply reinforce them. Sometimes, even anthropologically organized texts echo these simplistic images when chapters focus on topics such as cultural values, family organization, economics, government, communication, and the arts. Unless Japan is one of the separate case studies in such a text, Japanese customs, values, arts, and institutions are presented as isolated examples of cultural variation rather than as integral elements of a total Japanese cultural system. The danger is that instead of giving students the tools and knowledge for understanding cultural differences, these images simply underscore the vision that the Japanese are different, strange, and undecipherable. Rarely do the textbooks consider the similarities between Japan and the U.S. What then should a text have in it to correct such skewed visions of Japan?

This Teacher's Corner, the second in a series of guides to textbook selection, suggests basic general points anthropologists would encourage you to consider as you evaluate textbooks that include Japan. (For the first guide to Global History/World Civilization texts, see Anthro Notes, Vol. 12, No. 1, Winter 1990, pp. 7-8). In this second guide we draw examples from widely used texts that include Japan such as:

- 1) *Global Insights* by James N. Hantual et al. (Columbus, Ohio: Merrill Publishing Co., 1988);
- 2) *A Global History* by Leften S. Stavrianos et al. (Boston: Allyn and Bacon, Inc., 1979);
- 3) *World Cultures* by Claren L. Ver Steeg. (Glenview, Illinois: Scott, Foresman and Co., 1977); and
- 4) *World Geography Today* by R. J. Sager, D. M. Helgren and S. Israel (Austin: Holt, Rinehart, and Winston, 1989).



General Considerations

At a minimum, a cultural history or world civilization text should discuss environment, cultural values, history, and language. Ideally the text should analyze how these elements interact and how they affect politics, work, family life, the role of women, and the business world. It is important to "hear" Japanese speak from primary or secondary sources, either in narratives of their experiences and perspectives or in profiles of individual Japanese. *Global Insights* provides both the minimum and the ideal. In contrast, *World Cultures* does not have a separate section on Japan to show integration; hence the reader has a disjointed or skewed perspective and comes to know only about department stores, flower arrangements, the art of gardens, Haiku poetry, marriage partners, music, and social values.

Some texts, such as *A Global History*, focus primarily on China and consider Japan only in relationship to the history of China or the U.S. Granted it is impossible to cover every area of the world so that any teacher has to select the key countries for the course. *World Geography Today* is not a history or world cultures text but exemplifies a format in which many secondary students are introduced to other cultures and regions. Although this book

does have a separate chapter on Japan and Korea, as a geography text it focuses on the physical environment and its effect on agricultural and industrial production and settlement pattern. History and "way of life" are covered but these are not related to predominant cultural values, religions, ideologies, or language.

1. Environment

It is essential that any textbook point out the size; the mountains, including 190 volcanoes; the chain of islands; the frequency of earthquakes; the monsoons; and the absence of raw materials. Past and present cultural responses to crowding, dependence on foreign raw materials (especially oil and lumber) and frequent and unpredictable natural disasters should also be discussed.

2. Cultural Values

Does the text describe Shintoism and Buddhism, the two predominant religions in Japan, and explain that people often practice both? Shinto rituals honor ancestors and the forces of nature leading to reverence for the natural world, love of simplicity, and concern for cleanliness and good manners. Buddhism influenced the arts, and most Japanese today use Buddhist rituals in funerals and memorial rites for the dead. Both religions are used to affirm family ties and provide a sense of continuity with the past (p. 288, *Cultural Insights*).

What often confuses Americans and leads to cultural misunderstanding is a Japanese value system that emphasizes conformity rather than individualism, social obligations, saving face rather than resolution through open confrontation, ranking, the use of etiquette to reduce social tension, and greeting behavior including bowing. These values do not exist in a vacuum but evolved from historical forces and are best understood in the context of a highly crowded, compact country where 70% of the land is mountainous, only 7% is arable, and the archipelago offers no room for expansion.

The text should also discuss the Japanese work ethic and the intense studying in high school, often referred to as "examination hell." Why such pressure? In part, a high score on the examination at the end of high school not only determines where a person goes to college but where that person will work for the rest of his life. Different businesses have strong ties to particular universities--the source of their work force. Loyalty to and ties between institutions play a greater role than in the U.S. where such practices might be seen as unfairness or favoritism. As a result, college is often a far more relaxed time than high school.

Finally, the text should include Japanese attitudes toward nature. How are they different from those of the West, and why? Differences in cultural values are reflected in studies carried out by American and Japanese anthropologists, respectively. Americans who studied the Ituri Forest pygmies and Kalahari bushmen emphasized how few possessions people had, and how they shared both possessions and food freely among themselves. Japanese anthropologists, on the other hand, were struck by the hunter-gatherers' freedom of movement in a relatively unbounded space.

3. History

Does the text explain the major trends in historical change, noting the periods of isolationism and the minimal role of immigration or conquest during the last 2000 years? Although not anthropological per se, it seems important to analyze the Japanese drift to war during World War II. Is a Japanese perspective offered or only a U.S.? Are traditional Japanese values discussed such as physical courage and strict adherence to authority in order to show their role in leading Japan into the War. How did MacArthur's postwar changes alter the country?

Are the differences between urban and rural life shown? Is the relationship between the citizen and the government explored? Business and government traditionally and even today have had strong ties to each other, and local and national governments engage in many

practices Americans would find oppressive or unconstitutional.

If teachers are exploring comparative economic and political structures, they need to be aware of the problems when using such words as feudalism and imperialism. As Umesao Tadao states, "When we use the term 'feudal system' in Japanese, we express it using the Chinese characters for feudalism. However, in Marxian terminology, the entire pre-modern age is referred to as 'feudalistic'. In present-day China, therefore, 'feudalistic' is applied to both Chinese and world history to mean 'pre-modern'. But the substance of the feudal system in Chinese and Japanese history is completely different.

Similarly, Europeans who came to Japan during the Meiji period first described the Tokugawa Shogunate as a feudal system. They based this on their own interpretation of its similarities with the feudal period in Europe." (SES 25:8). Major differences existed, however.

Since many Americans are distressed with the current economic competition with Japan, it is important that a text explain how Japanese corporations are different. Firms were not created historically in the same way as were Western companies. Western history and theory often do not apply. "Seen alone, Japanese enterprises are smaller than their Western counterparts, and on the whole, they are more specialized in form and function; seen as parts of a wider association of related firms, Japanese companies are often formidable building blocks of macro-organizational diversity and integration." (SES 26:123)

The Japanese economic development should not be characterized as a "miracle." As Harumi Befu from Stanford University notes, "Westerners have regarded their own economic development as being normal.... Deviations from the Western patterns are just that: deviations from the norm and from the normative. True to the nineteenth century unilinear evolutionism, the West still claims achievement of the pinnacle of economic success, which non-Western nationals are supposedly following and trying to achieve..... Enter Japan, which

performs better than the teacher that the West is supposed to be.... The Westerner's reaction is that this cannot be, and is therefore a miracle.... Also, to call the Japanese case a 'miracle' simply reinforces the notion . . . that Japan is unique. It does not help us understand Japan as a normal, natural phenomenon..." (SES 26:202).

4. Language

Contrasts between English and Japanese can provide other insights into cultural differences. How do languages differ visually and in the direction in which they are read? Even though the Japanese once borrowed the Chinese system of writing, the Japanese language now has little in common with Chinese. Japanese uses picture words called kanji and symbols expressing different sounds called kanaa. Japanese incorporates a complex ranking system so that a speaker must consider whether the person addressed is a male or female, is older or younger, or has a higher status. The rank of the speaker will affect the endings of words as well as the actual vocabulary. For example, more than a dozen pronouns can be translated as "I". Women are ranked generally lower than men in the language.

Students should also appreciate why translation is difficult. For example, "hai" is usually translated as "yes." It means, however, yes I understand you, not yes I agree with you or yes I will do that. For Americans, conducting business discussions with Japanese and attempting to reach agreements, those distinctions are critical. Hurt feelings, a sense of betrayal, labels of "tricky, devious," and lack of trust all can grow simply from misunderstanding the meaning of the word yes.

Conclusion

What is important, then, in a textbook is that students see the interaction among environment, history, cultural values, and language. If these areas are covered in some detail, students then will have the background to explore in a more in-depth way how those four qualities affect politics, work, family life, the role of women, and the business world. They will then see why and how Japanese culture has certain

characteristics that affect many areas of Japanese life. Ideally, students who have an initial appreciation of Japanese differences and similarities within an integrated cultural system will be able to ask questions leading to a better understanding of Japan --whether they are reading newspaper articles on Japan, working in a Japanese-owned company, negotiating with Japanese officials, seeing Japanese portrayed in movies, or simply working with and entertaining Japanese colleagues and friends.

JoAnne Lanouette
Alison Brooks

Additional References:

Norbeck, Edward. *Changing Japan*. (Case Studies in Cultural Anthropology). Holt, Rinehart, and Winston. (A standard anthropological resource)

Senri Ethnological Studies (SES). Japanese Civilization in the Modern World. National Museum of Ethnology. No. 25 Administrative Organizations, 1989; and No. 26 Economic Institutions, 1989. Senri Expo Park, Suita, Osaka, 565 Japan. (Reports from international symposia offering a Japanese perspective)

WANTED! TEACHING RESOURCES

The AAA Task Force on Teaching Anthropology is working toward producing four resource and activity guides for teaching anthropology at the elementary and upper grade levels. The objective is to help teachers incorporate cultural and physical anthropology and archaeology into their teaching.

To organize this large amount of material, the committee has established a preliminary outline of subject categories widely used by school systems. These subject categories for the elementary grades are: families and communities; U.S. Studies (Native Americans, ethnic diversity, immigrants, and African-Americans); human-environment interaction; human origins; ancient civilizations (Egypt, Mesopotamia, Ancient Kingdoms of Black Africa, China, Greece, Rome, South America); and peoples of the world (peoples of Africa, East and Southeast Asia, the Near East and India, Europe, South America).

The subject categories for secondary and undergraduate levels include: social studies (world geographic areas); social sciences (anthropology, economics, geography, American and world history, psychology,



sociology); humanities (literature, art, languages and communication, world religions, philosophy); science and mathematics.

One volume for each level will focus on resources (books, films, curricula aids, games) and the other on activities. These volumes will be issued by the American Anthropological Association for a nominal fee to cover the cost of publication.

This is a large task and we need your help. We are asking for your recommendations of anthropology related books, films, curriculum materials and teaching activities that can be used to teach the subjects described above. Please send your best recommendations by July 2 to: Ann Kaupp, Department of Anthropology, National Museum of Natural History, Smithsonian Institution, Washington, D.C. 20560.

BOOK REVIEW

GENDER AND ANTHROPOLOGY: CRITICAL REVIEWS FOR RESEARCH AND TEACHING, edited by Sandra Morgan, American Anthropological Association, Washington, D.C. 1989. To obtain a copy, write to: AAA, 1703 New Hampshire Ave, N.W., Washington, D.C. 20009. The cost is \$15 for AAA members and \$20 for non-members.

This new volume culminates a three-year project designed to bring the last two decades' of anthropological research on women and gender to the teaching of anthropology (see "New Gender Perspectives in Anthropology," *AnthroNotes*, vol. 11, #3, Fall 1989). It is a gold mine of ideas, resources, practical teaching strategies, and activities for the classroom.

The book opens with a solid introductory essay by Sandra Morgan outlining the impact of feminist anthropology on the entire field of anthropology during the past two decades. Morgan traces much of the change to publications of the 1970's that heralded "a new era...as women became central to the research and theoretical agendas of both younger and more established scholars" (p.4). Eighteen chapters follow focusing on eight subfields or topics and ten culture regions. Each chapter contains a short conceptual essay laying out the basic themes, debates, and recent research in the subfield or topic under consideration; a listing of bibliographic and other resources such as films; and two curricular suggestions.

The book is very comprehensive. Topics include Early Hominid Evolution; Primates; Archaeology; Women in Biosocial Perspective; Public Policy in the US; Women, Technology, and Development; Gender and Language; and Sex, Sexuality, and Gender. Culture areas include the United States, modern China, Southeast Asia, Hindu Society, the Middle East, Latin America, Sub-Saharan Africa, English-speaking Caribbean, American Indian Women, and Aboriginal Australia.

In most cases, the curricular suggestions are presented as "teaching activities," and provide a highly unusual approach and rich resource for the college or secondary school

teacher. Examples include "Images of Women and Men in Prehistory," "Material Expressions of Gender in the United States: A Case Study in Ethnoarchaeology," and "Manly Hearts and Changing Ones: Female Gender Variance in American Indian Societies." Together, these activities create a model "student-centered" approach to teaching anthropology. They provide ways to incorporate the new scholarship on women and gender and offer innovative and exciting classroom activities.

The practical utility of this Guide can be illustrated best by describing for our readers one of the special topic sections. The first chapter by Adrienne L. Zihlman from the University of California, Santa Cruz is titled "Woman the Gatherer: The Role of Women in Early Hominid Evolution." Zihlman begins by stating that the "purpose of this module is to provide guidance for incorporating women and their activities into discussions of hominid evolution and early hominid life" (p.21). The author focuses on the early stage of human evolution, two to four million years ago, and explains that several kinds of information are relevant: time, fossil record, living species, and the evolutionary process. She then summarizes information derived from the fossil record, primate behavior, and gatherer-hunters, information that can delineate women's reproductive, economic, and social activities and contributions to human evolution. She concludes "women made and used tools to obtain food for themselves, as well as to sustain their young after weaning; walked long distances; and carried food and infants bipedally on the African savannas. It is also reasonable to conclude that hunting did not emerge at the earliest stage of human evolution. Rather, hunting probably developed much later in human history and derived from the technological and social base in gathering" (p.31). Altogether, her argument supports her conclusion that "a balanced understanding of human evolution should incorporate women as well as men, children as well as adults into the picture and include the range of activities throughout the life cycle on which natural selection acts, rather than a narrower focus on one of them."

Following this essay is both a bibliography and an annotated bibliography of sources that may be assigned to students or used by instructors to focus discussion or prepare lectures on some aspect of the role of women in evolution. Zihlman's two curricular suggestions include one on Gender and Tools and another on Images of Women and Men in Prehistory. The objective of the first activity is to "examine female and male differences in tool use and associated activities among chimpanzees and gathering-hunting peoples in order to help students think about possible early hominid technology and activities associated with women" (p.37). Films and readings as well as three separate sets of discussion questions are used to focus students' attention on tool use among chimpanzees, contemporary gathering-hunting peoples, and early hominids of 2-4 million years ago.

The second activity, images of men and women in prehistory, has as its objective to "raise the awareness of how women have been depicted in evolutionary reconstructions, to question the assumptions underlying these depictions, and to focus on or create more positive images of women in prehistory. The author suggests many sources such as Time-Life Books or National Geographic Magazine articles and many films as well. (Most of the materials listed can also be found in the "Introductory Bibliography to Human Evolution" available from the Office of Public Information, Department of Anthropology, National Museum of Natural History, Smithsonian Institution, Washington, D.C. 20560.) Zihlman then poses very specific questions for students to ask while examining visual representations of early humans. Questions include:

1. Are women or female figures present? Assuming female figures are present, are the figures identified as women? If so, how?
2. Location: Where are the women placed? Foreground? Background? What does this suggest about their position in the group? Contrast this to where the men placed are in the illustration.

3. Body posture: Are women pictured standing, sitting, moving? How about the men?

4. Activities: In what kinds of activities are the women engaged? Are they holding or using tools? What activities are men doing? Is the range of activities for men greater than for women?



5. Demeanor: Where are the women looking (out, down)? Do they appear to be afraid? timid? in charge? Are women depicted burdened with children? as leaders? dependent? marginal? How are men depicted?

6. Overall, what kind of impression is conveyed about early hominid society? Is it women or men who are doing the work, sharing food, caretaking, making or using implements?

7. Is a sexual division of labor implied? How do these characterizations fit with what you have learned in this course?

8. How might reconstructions of the past reflect our own cultural stereotypes of what are proper roles for men and women?

9. With knowledge of nonhuman primates and gatherer-hunters, what kind of picture might you construct of early hominid life?

(continued on p.15)

TEACHER'S CONFERENCE

The Northeast Regional Conference on Social Studies (a.k.a. NERCE) meets annually in Boston in March. This conference is organized by the social studies councils in the six New England states, New York and New Jersey. It is one of the most active affiliates of the National Council for Social Studies. It is well attended and offers a diversity of activities and resources to teachers and administrators. This year's pre-conference workshop was given by the Massachusetts Global Alliance. As well as having a traditional publishers' hall, the conference included a media festival, computer lab, museum marketplace, and, for the first time, complimentary exhibit space for fifteen non-profit organizations such as Amnesty International, Earthwatch, and Cultural Survival.

As participants in the American Anthropological Association's Task Force on Anthropology in the Schools, John Herzog (Northeastern University) and Judith Nierenberg (Documentary Educational Resources) organized a session to inform teachers about the task force and to elicit comments, requests, and any other information to report back to the task force. Presentations were given by Herzog and Nierenberg and four Massachusetts teachers. Teachers included Mary Anne Wolff, North Reading High School, who received an NSF grant on teaching anthropology at the pre-collegiate level and wrote her dissertation on the results; Tom Brow, department chair, Melrose Junior High School, teacher of world cultural courses; Elaine Engleberg and Sal Lopez, Lexington High School, who both teach anthropology but with very different approaches. Sal is a returned Peace Corps volunteer who has very direct and personal experiences of the "marginal native," whereas Elaine teaches a more theoretical course with emphasis on art and psychology. The teachers and administrators who came to the session were from both public and independent schools and many have taught anthropology courses for years.

Several issues were raised that are important for the task force to hear. Anthropology has long been taught in the schools and with

many different approaches. The range is from full-year courses that are filled every year to global studies courses for non-college bound students. Many middle schools incorporate cultural anthropology into geography courses, which are now very popular. Anthropology is certainly alive in the schools, but it may not be particularly well. Because of the enormous cut-backs in school funding, courses that do not fill are dropped. In addition, administrators are reluctant to allow a teacher to develop a course for several reasons: if the course is dropped, that teacher is likely to be riffed, or if a teacher develops a course over the years and the school invests in materials and then the teacher leaves, there is not necessarily a teacher prepared to take over the course.

Another issue raised was academic credibility. One teacher suggested an Advanced Placement course in anthropology as a bone fide course that could be as competitive on college applications as European history or chemistry. An alternate possibility is to have anthropology (particularly physical anthropology and archaeology) fill a science as well as a social studies requirement. Most teachers justifiably resent any implication that students take anthropology for an easy grade.

On a final note, teachers are tremendously resourceful in developing new materials and in finding speakers and programs in their communities to enhance their classes. Teachers utilize a variety of materials, including many of the readings assigned in introductory courses at the collegiate level, and were pleased to receive the additional resource materials provided by the participants. Teachers are highly tuned to their students' needs and capabilities and do not need collegiate academics shaping courses for them. Preferably, they need advocates for what already exists in many schools.

Judith Nierenberg
Documentary Educational Resources

("Archaeology" continued from p.4)

materially "worse off" in the first years of freedom than they were as slaves. Structural remains from the cabins of freed men and women indicated that the chimney was constructed of reused brick, haphazardly built on a bed of oyster shell. Tools were used until they were completely worn, and occupants of the site subsisted almost entirely upon wild game--turtle, fish, and small mammals. A recent excavation of another refugee camp of ex-slaves should provide additional information of the immediate material effects of emancipation.

The Diet and Health of Slaves and Free Blacks

Archaeological studies of nutrition are particularly important to discussions of slave nutrition, a realm of slave life that has been greatly debated by students of slavery. One school of thought suggests that slave diet was nutritious and that caloric intake often exceeded modern recommended levels of chief nutrients. The more accepted view is that slave diet was inadequate and malnutrition was a frequent problem reflected in high child mortality and in the prevalence of diseases resulting from nutritional deficiencies. The analysis of food remains can contribute to this discussion by documenting the kinds of foods slaves consumed. Studies conducted by zooarchaeologists (archaeologists who analyze food bone) indicate that slaves supplemented their mundane plantation rations of cornmeal and fatback with small mammals they hunted and fish they collected in nets. Several studies of faunal remains collected from sites in the southeastern United States suggest that food collection activities of slaves accounted for 35 to 40 percent of the meat in slave diet.

Analyses of human remains provide a wide range of information on nutrition, pathologies, and occupational stresses. One of the largest skeletal samples of African Americans was unearthed from an abandoned cemetery of Philadelphia's First African Baptist Church (FABC), which served as a burial ground for free African Americans between 1823 and 1843. More than 140 adult and children skeletons were

analyzed and reburied. Analyses revealed that the quality of life and the health status of free black Philadelphians and various slave populations were similar. These conditions were particularly evident in the analysis of dental enamel undertaken by Michael Blakey, a physical anthropologist at Howard University. Blakey introduced a new method that gives a record of fetal and childhood health by measuring defects in the dental enamel of adult skeletons. Results show that their lives were particularly harsh, especially as fetuses (linked to maternal health) and as children. This finding came as a surprise to Blakey who thought that free African American children would have had somewhat better health than did slave children.

Occupational stress in the FABC population was particularly evident among females, many of whom were laundresses. The stress of laundering is evident in their well-developed triceps and pectoral muscles and fingers. One individual displayed evidence of cervical breakdown, perhaps from carrying the laundry as a head load, and of bending stress on lower vertebrae. Tuberculosis, iron deficiency anemia, arthritis, and cholera are among the diseases the cemetery population suffered.

The healing paraphernalia uncovered from the Jordan Plantation in Texas suggest the kinds of folk medicine sought by African Americans, but excavations of slave cabins and plantation infirmaries give indications of the kinds of medications slaveowners administered to the slaves. Excavations of slave cabins along the Georgia coast indicate that slaves regularly consumed patent medicines with high alcoholic contents and brewed alcoholic beverages. While some of this consumption was perhaps recreational in nature, the plantation records of a slave site I excavated indicated that patent medicines and homemade rum regularly were dispensed to the slaves as a preventative for rheumatic diseases. Future excavations of plantation infirmaries will possibly turn up medical instruments and other objects used to treat slaves.

From this brief overview of African American archaeology, it should be apparent that this research presents new and

provocative information on the lives of African Americans. Critics of historical archaeology often claim that all this information is in the written record; I challenge them to find it.

Suggested Readings

Kelso, William. "Mulberry Row: Slave Life at Thomas Jefferson's Monticello." *Archaeology* 39:5 (1986).

Orser, Charles E, Jr. "Artifacts, Documents, and Memories of the Black Tenant Farmer." *Archaeology* 38:4 (1985).

Parrington, Michael and Daniel G. Roberts. "The First African Baptist Church Cemetery." *Archaeology* 37:6 (1984).

Singleton, Theresa. "Breaking New Ground." *Southern Exposure* 16:2 (1988).

_____, editor. *The Archaeology of Slavery and Plantation Life*. Orlando, FL: Academic Press, 1985.

A comprehensive bibliography on African American Archaeology is in preparation and will be available from the Society of Historical Archaeology, Spring 1991. Write: Society for Historical Archaeology, P. O. Box 231033, Pleasant Hill, CA 94512.

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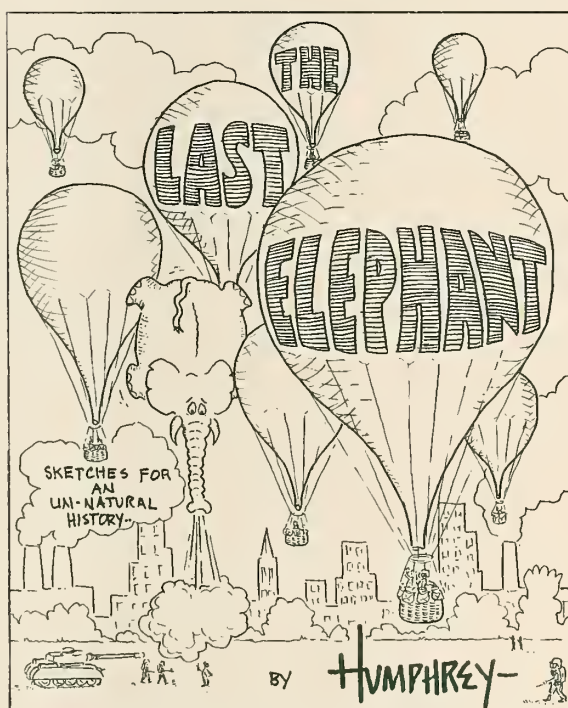
EDUCATION POSITION

The Center for American Archeology, an internationally respected research and educational institution, seeks a creative individual to fill a teaching and administrative position in the Education Program. Administrative responsibilities include student recruitment, public relations, and marketing. Teaching responsibilities include outdoor education in human interaction with the environment. Teaching certification and experience in middle school and/or high school education

("Gender" continued from p.12)

The Gender Project, and its resulting book, is a superb example of what commitment, hard work, and solid research ability can produce. The American Anthropological Association, the Advisory Board for the Gender and Anthropology Project, The Fund for the Improvement of Post-Secondary Education (FIPSE), and Sandra Morgan are all to be commended for this worthy and helpful book. The results are now available, and the *Anthro.Notes* editors highly recommend that our readers obtain a copy for their own use and teaching.

Ruth O. Selig



Anthro.Notes' cartoonist Bob Humphrey has just finished *The Last Elephant*, a cartoon book that will be published this fall by Friends of the National Zoo. For ordering information, write to: Susan Lumpkin, Friends of the National Zoo Publications, National Zoo, Washington, D.C. 20008.

required. Salary negotiable. Starting date mid-September 1990. Send curriculum vitae and names of three references to: Katie Egan, Director of Education Program,

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THE FIRST SOUTH AMERICANS: ARCHAEOLOGY AT MONTE VERDE

When did human beings first set foot in the New World? How did they get here? What lifeways did they follow? How did they adapt to and affect the ancient American ecosystem? These questions have been hotly debated for over 100 years. Scientists now agree only that big-game hunters were in North America by 11,500 years ago.

The earliest possible date for the initial arrival of early humans and other aspects of their culture are disputed, although field work over the last fifteen years has yielded more evidence about their economy, technology and social organization. But the biggest surprises have come from South America, where recent work suggests that this continent was occupied by at least 12,000 years ago, and possibly much earlier, by people with very diverse subsistence strategies.

In recent years, the most significant advances in the study of the First Americans have come from innovative data recovery and analysis techniques that have yielded vastly more accurate reconstructions of ancient environments and subsistence strategies. For example, the soil from a house floor at Monte Verde, in Chile, contained amino acids specific to collagen, a protein found in bone, cartilage, and skin. Microscopic analysis of the material suggested that a thick skin, possibly a mastodon hide, had been used in the construction of the shelter. The first South Americans were not just specialized big-game hunters armed with large bifacially-chipped projectile points, like the Clovis hunters of North America, but collected wild plant foods and fished in streams and lakes. A few North American sites, such as



PLEISTOCENE HUNTER-GATHERERS IN THE CHILEAN FORESTS

Meadowcroft Rockshelter, have also provided evidence of diverse economic strategies at an early date.

In the early 1970s, evidence about the first South Americans was limited to a small series of stone tools and animal bones, mostly from caves and rockshelters. Dates for these sites were often questionable, and many of the tools were not clearly made by human hands. Twenty years of work by Latin American archaeologists and others have provided more reliable and accepted data. Sites such as Tequendama, Tibito and El Abra in Colombia, Monte Verde in Chile, Los Toldos in Argentina and Pedra Furada in Brazil are all radiocarbon dated to 11,500 years ago or possibly earlier. While the minimum occupation age of South America appears to be around 12,000 years ago, some evidence suggests a possibility that the earliest South Americans actually arrived as long ago as 20,000 to 35,000 years ago.

Monte Verde Discovered

The Maullin River flows through the cool forested country west of the Andes in South Central Chile. In 1976, while directing the anthropology program at the Southern University of Chile, in Valdivia, I was surveying the river near the site of Monte Verde with a number of Chilean and Argentinean colleagues. Buried in the banks of a small tributary creek, we found an unusual site. Layers of peat bog, which only form in cool wet climates where organic materials are water-logged before they have a chance to decay, had preserved organic remains to an extraordinary degree. Not only did we find chipped stone tools and animal bones but also well-preserved wooden tools, house foundations of wood and earth, and the remains of medicinal and edible plants. These suggested the presence of a complex village settlement.

To our surprise, radiocarbon dates on both the cultural and non-cultural levels placed this settlement between 12,000 and 13,000 years ago. In another area of the site, deeper deposits contained stone tools and possible cultural features that may be even older.

At Monte Verde, the extraordinary preservation, diversity, and complexity of organic

and inorganic remains have been studied by an interdisciplinary research team to reconstruct the paleoecology of the site area and to critically evaluate the evidence for human intervention in the site. Specialists include more than sixty scientists from such disciplines as geology, palynology, botany, entomology, animal pathology, paleontology, ecology, forestry engineering, malacology, diatomology, and microbiology.

The area around Monte Verde today has moderately warm, dry summers and cold, rainy winters, with a mean annual temperature fluctuating between 12 and 15 C. The climate that prevailed in the late Pleistocene after the ice sheets receded resembled this setting, although it was probably slightly cooler and more humid. A forest made up of a mixture of deciduous and coniferous trees covers the region today; it abundantly supplies numerous varieties of edible tubers, nuts, berries, fruits, and soft and leafy plants throughout the year. There are also small game, freshwater mollusks, and fish. In late Pleistocene times, mastodons, saber-tooth tigers, ground sloths, and probably camelids roamed the area. As the Late Pleistocene sea level was lower, the nearest point on the Pacific coast lay about 65 kilometers west of the site and offered many edible species of marine organisms. The early inhabitants of Monte Verde could choose from all of these varying sources of food.

Late Pleistocene Settlement Structure

The excavation at Monte Verde was divided arbitrarily into east and west sides. On the east side the remains of ten or eleven foundations of residential huts were recovered. The foundations measure about 2.5 by 3.5 meters and are formed by small timbers, limbs, and roughly shaped planks usually held in place by wooden stakes. Fallen branches and vertical post stubs reveal that the hut frames were made primarily of hardwoods. The side walls were placed against a log foundation and then apparently draped with animal skins as suggested by the presence of a few small fragments of skin still clinging to the fallen side poles. Preliminary results of microscopic and other studies by microbiologists and pathologists suggest that the skins are

most likely from a large animal, probably a mastodon.

A wide variety of plant remains, stone tools, food stains, and small braziers (shallow pits for holding burning coals) was found on the living surface inside each hut. The braziers, which contained ash, specks of charcoal, and the remains of numerous plant foods, were probably used to heat each hut and to warm the food. Cooking was evidently a communal effort, as shown by the discovery of two large clay and charcoal hearths centrally located outside the huts. The recovery of three roughly-shaped wooden mortars and several grinding stones near the hearths suggest that the preparation of plant food took place next to the hearths.

Who were these ancient South Americans? No human bones have yet been recovered from the excavations at Monte Verde, but there are two indirect sources of information about the site's inhabitants. One is the imprint of a foot preserved in clay around a large hearth. Another consists of possible coprolites (fossil excrement) that appear to be of human origin. These were recovered from small pits dug in the ground also near a hearth.

The west side of the site is characterized by a unique structure and activity area. The central feature is a roughly ovoid-shaped artificial rise of sand with a little gravel. Resting on this rise is an architectural foundation made of sand and gravel compacted to form a peculiar wishbone shape. Fragments of upright wooden stubs were present approximately every few centimeters along both arms of the structure. Presumably these are the remains of a pole frame draped with hides. The same type and size of braziers recorded on the east side of the site were found both inside and outside the structure. Of particular interest is the association of the hearths with preserved bits of apparent animal hide, of burned seeds and stalks of bulrush reed, and of masticated leaves of plants found in warmer environments and used today by the local Mapuche Indians for medicinal purposes. The shape, the location, and the artifactual content of the wishbone feature suggest that the structure and this end of

the site served a special purpose, rather than as living quarters.

Tools and Food Remains at Monte Verde

The stone tools from Monte Verde are similar to those from other sites in the Americas, although the use of naturally fractured stones, common at Monte Verde, has not been widely reported from other sites. The organic remains, however, are more unusual. More than four-hundred bones, including those of extinct camelids, mastodons, and small game were recovered from the site. Most of the bone remains are rib fragments of at least seven individual mastodons. Several bones were modified as possible digging sticks, gouging tools, or other implements.

Beside the wooden architecture foundations, several types of artifacts made of wood were excavated, including a sharply pointed lance-like implement, three crude wooden mortars, two tool hafts or handles, and more than three hundred pieces of wood



THE ARCHAEOLOGISTS FOUND EVIDENCE OF SKIN HOUSES, WOODEN TOOLS, FOOTPRINTS AND COPROLITES AT THE SITE....

exhibiting cut or planed facets, burned areas, cut marks, and/or smoothed and thinned surfaces. Several bones were sharpened and burned. Their association with underground plant parts (tubers and rhizomes) and with grooved wooden slats with horizontal grooves suggest that they might have been used as digging sticks and gouging tools.

What did the ancient Monte Verdeans capture with their assortment of stone, bone and wooden tools? From the array of inorganic and organic remains, we can determine that they were exploiting resources from distant reaches of the Mauillín Valley. Most of the differing environmental zones were aquatic areas: swamps, bogs, river bottoms, marshes, estuaries, and lagoons. How many people lived at the site? Ten or eleven residential structures and one unique structure have been excavated. Among the modern Mapuche, similar huts are occupied by two to three individuals. By analogy, we estimate that at least 25 to 35 individuals lived at Monte Verde during the Late Pleistocene.

If wood had not been preserved, we would have recovered only stone tools, postholes, stains and perhaps bones and mollusk shells. Evidence of plant foods and most of the residential characteristics that tell us this was a village would have been lost. In fact, the site might well have been interpreted as a kill site with a temporary residential component, like most of the North American palaeoindian sites.

Conclusion

The preservation of the perishable materials at Monte Verde, along with the diversity of the social, technological, and economic activities represented there, makes this site exceedingly important and scientifically unique at this point in time. Monte Verde warns us all to keep an open mind toward the possible diversity of lifestyles of the first Americans and of the various ways these lifeways might be expressed and preserved in a local archaeological record.

Furthermore, this very early dated occupation site comes from the southern end

of South America and hence reminds us that we will probably discover and verify yet earlier sites in North America in the future. The next few years will undoubtedly yield additional information from both continents about the entry date of the first Americans and about their environment, technology, and lifeways. But even if more such information is discovered and accepted, the emotionally charged issue of when the first humans entered the New World may never be settled, since even if we discovered the very first evidence of that arrival, we probably would never recognize it as such. It is the questions being asked and not a single answer being sought that is the driving force motivating this scientific search on two continents for clues to the earliest Americans and to the solutions they developed to flourish in the environments in which they lived.

For Further Reading:

Bryan, Alan L., ed. *New Evidence for the Pleistocene Peopling of the Americas*. Orono: Center for the Study of Early Man, University of Maine, 1986.

Dillehey, Tom D., ed. *Monte Verde: A Late Pleistocene Settlement in Chile*. Vol. 1: A Palaeoenvironment and Site Context. Smithsonian Institution Press, 1989.

Dillehey, Tom D. "A Late Ice-Age Settlement in Southern Chile." *Scientific American* 251 (October 1984):106-117.

Fagan, Brian M. *The Great Journey: The Peopling of Ancient America*. New York: Thames & Hudson, 1987.

Shutler, Richard Jr., ed. *Early Man in the New World*. Beverly Hills: Sage Publications, 1983.

Latin American 'specialists' who have contributed to the documentation of the first South Americans include: G. Correal, G. Ardila, J. Cruxent, A. Cardich, L. Nunez, G. Politis, N. Flegenheimer, N. Guidon and P. Schimitz.

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WHY I'M NOT THANKFUL FOR THANKSGIVING

[Note: The following article by Michael Dorris gives insights into the feelings of a parent of Indian children who himself is a scholar, a novelist, and a member of the Modoc tribe. These insights provide another view of holiday customs that often are viewed as innocuous and even celebratory. Thanksgiving for many is seen as a uni-dimensional historical experience rather than the encounter of richly diverse cultures. It is out of the failure to appreciate and value the richness of diversity that cultures and peoples become caricatures. This article is included in *Anthro. Notes* in the hope that greater sensitivity to other peoples and the cultures from which they come can enable teachers to engage their students in true multicultural appreciation.

--Dave Warren, Deputy Director,
National Museum of the American Indian]

Native Americans have more than one thing *not* to be thankful about on Thanksgiving. Pilgrim Day, and its antecedent feast Halloween, represent the annual twin peaks of Indian stereotyping. From early October through the end of November, "cute little Indians" abound on greeting cards, advertising posters, in costumes and school projects. Like stock characters from a vaudeville repertoire, they dutifully march out of the folk-cultural attic (and right down Madison Avenue!) ughing and wah-wah-wahing, smeared with lipstick and rouged as if ready to attend a midnight showing of The Rocky Horror Picture Show. Decked out in an assortment of "Indian suits" composed of everything from old clothes to fringed paper bags, little trick-or-treaters and school pageant extras mindlessly sport and cavort in what Duane Bird Bear once aptly termed "cultural drag."

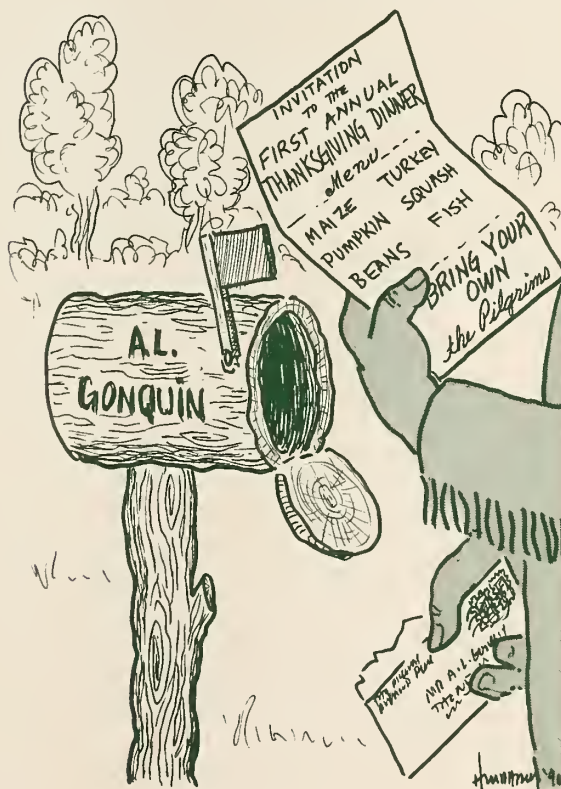
Considering that virtually none of the standard faesurrounding either Halloween or Thanksgiving contains an ounce of authenticity, historical accuracy, or cross-cultural perception, why is it so apparently ingrained? Is it necessary to the American psyche to perpetually exploit and debase its victims in order to justify its history? And

do Native Americans have to reconcile themselves to forever putting up with such exhibitions of puerile ethnocentrism?

Attitudes pertinent to "racial" or sex-role identity are among the most potentially hazardous, for these can easily be internalized--particularly by the "minority" child. Such internalized attitudes profoundly affect self-concept, behavior, aspiration, and confidence. They can inhibit a child before he or she has learned to define personal talents, limits or objectives, and tend to regularly become self-fulfilling prophecies. Young people who are informed that they are going to be underachievers do underachieve with painful regularity.

The progeny of each oppressed group are saddled with their own specialized set of debilitating--and to parents, infuriating--stereotypes. As the father of three Native American children, aged ten, six, and three, I am particularly attuned (but not resigned) to that huge store of folk Americana presuming to have to do with "Indian lore."

(continued on p. 6)



From the "One little, two little..." messages of nursery school, to the ersatz pageantry of boy scout/campfire girl mumbo jumbo, precious, ridiculous and irritating "Indians" are forever popping up.

Consider for a moment the underlying meanings of some of the supposedly innocuous linguistic standbys: "Indian givers" take back what they have sneakily bestowed in much the same way that "Indian summer" deceives the gullible flower bud. Unruly children are termed "wild Indians" and a local bank is named "Indian head" (would *you* open an account at a "Jew's hand," "Negro ear" or "Italian toe" branch?) Ordinary citizens rarely walk "Indian file" when about their business, yet countless athletic teams, when seeking emblems of savagery and blood thirstiness, see fit to title themselves "warriors," "braves," "redskins," and the like.

On another level, children wearing "Indian suits," playing "cowboys and Indians" (or, in the case of organizations like the Y-Indian Guides, Y-Indian Maidens and Y-Indian Princesses, simply "Indians"), or scratching their fingers with pocket knives (the better to cement a friendship) are encouraged to shriek, ululate, speak in staccato and ungrammatical utterances (or, conversely, in sickening flowery metaphor) --thus presumably emulating "Indians." With depressing predictability, my children have been variously invited to "dress up and dance," portray Squanto (Pocahantas is waiting in the wings: my daughter is only three), and "tell a myth."

Not surprisingly they have at times evidenced some unwillingness to identify, and thus cast their lot, with the "Indians" which bombard them on every front. My younger son has lately taken to commenting "Look at the Indians!" when he comes across Richard Montalban, Jeff Chandler, or the improbable Joey Bishop in a vintage TV western. Society is teaching him that "Indians" exist only in an ethnographic frieze, decorative and slightly titillatingly menacing. They invariably wear feathers, never crack a smile (though an occasional leer is permissible under certain conditions), and think about little besides the good old days. Quite naturally it does not occur to

my son that he and these curious and exotic creatures are expected to present a common front--until one of his first grade classmates, garbed in the favorite costume of Halloween (ah, the permutations of burlap!) or smarting from an ecology commercial, asks him how to shoot a bow, skin a hamster, or endure a scrape without a tear. The society image is at this time too demanding and too limiting a model.

As a parent, what does one do? All efficacy is lost if one is perceived and categorized by school officials as a hypersensitive crank, reacting with horror to every "I-is-for-Indian" picture book. To be effective one must appear to be super-reasonable, drawing sympathetic teachers and vice-principals into an alliance of the enlightened to beat back the attacks of the flat-earthers. In such a pose one may find oneself engaged in an apparently persuasive discussion with a school librarian regarding a book titled something like *Vicious Red Men of the Plains* ("Why, it's set here for 20 years and nobody ever noticed that it portrayed all Indi...uh Native Americans, as homicidal maniacs!"), while at the same time observing in silence a poster on the wall about "Contributions of the Indians (heavy on corn and canoes, short on astronomy and medicine).

Priorities must be set. One might elect to let the infrequent coloring book page pass uncontested in favor of mounting the battlements against the visitation of a travelling Indianophile group proposing a "playlet" on "Indians of New Hampshire." These possibly well-intentioned theatricals, routinely headed by someone called "Princess Snowflake" or "Chief Bob," are among the more objectionable learning aids and should be avoided at all costs. It must somehow be communicated to educators that *no* information about Native peoples is truly preferable to a reiteration of the same old stereotypes, particularly in the early grades. A year ago this month my older son brought home a program printed by his school; on the second page was an illustration of the "first Thanksgiving," with a caption which read in part: "They served pumpkins and turkeys and corn and squash. The Indians had never seen such a feast!" On the

(continued on p. 15)

TEACHER'S CORNER: ERASING NATIVE AMERICAN STEREOTYPES

How can we avoid stereotypes about Native Americans when we are teaching, selecting textbooks, or designing exhibits and public programs?

Cultural institutions reflect current issues of society. Both museums and schools are wrestling with new sensitivities and concerns with cultural diversity. For instance, at a recent Smithsonian symposium on Contemporary American Indian Art, several Native American artists asked why their paintings and sculpture are rarely shown at fine arts museums, but are more likely to be exhibited at anthropology and natural history museums. Native American artists also question why their work is not combined with other American artists' work in shows on American art (Kaupp, 1990).

In directing an alternative school for Native American children in Chicago, June Sark Heinrich found many misnomers and false ideas presented by teachers as they instructed students about the history and the heritage of Native peoples. She devised ten classroom "don'ts" to help teachers correct these common errors. The D'Arcy McNickle Center for the History of the American Indian at the Newberry Library in Chicago recently began designing a sample checklist for evaluating books about American Indian history.

This *Anthro.Notes* Teacher's Corner combines the two approaches. The questions that follow provide teachers and museum educators with ways to evaluate their own teaching and criteria to evaluate the materials they use.

1. Are Native Americans portrayed as real human beings with strengths and weaknesses, joys and sadnesses? Do they appear to have coherent motivations of their own comparable to those attributed to non-Indians?

2. In books, films, comic strips and curriculum materials, do Native Americans

initiate actions based on their own values and judgments, rather than simply react to outside forces such as government pressure or cattle ranchers?

3. Are stereotypes and clichés avoided? References should not be made to "obstacles to progress" or "noble savages" who are "blood thirsty" or "child-like" or "spiritual" or "stoic". Native Americans should not look like Hollywood movie "Indians," whether Tonto from the Lone Ranger days or Walt Disney's recent portrayals. Native Americans are of many physical types and also have European, African or other ancestry. Just as all Europeans or African-Americans do not look alike, neither do Native Americans.

Heinrich urges that television stereotypes should not go unchallenged. For example, "when Native Americans fought, they were

(continued on p. 8)



TONTO TENDERS HIS RESIGNATION

not more 'savage' than the Europeans and were often less so. Help children understand that atrocities are a part of any war. In fact, war itself is atrocious. At least, the Native Americans were defending land they had lived on for thousands of years. If Native Americans were not 'savage warriors,' neither were they 'noble savages.' They were no more nor less noble than the rest of humanity."

Television, especially old movies, often portrays the "Indian" speaking only a few words of English, often only "ugh." Yet anthropologists have carefully documented the complexity of Native American languages. At least 350 different languages were spoken in North America when William Bradford and the rest of the Puritans first stepped ashore in Massachusetts.

Stereotypes can be defused if teachers check their own expressions and eliminate those such as "You act like a bunch of wild Indians" or "You are an Indian giver." In a similar way, do not use alphabet cards that say A is for apple, B is for ball, and I is for Indians. It may seem trivial, but Heinrich argues that such a practice equates a group of people with things.

4. If the material is fiction, are the characters appropriate to the situations and are interactions rooted in a particular time and place? If they are, a particular group such as the Navajo or Chippewa living at a specific moment in history will be more likely to be brought accurately to life.

5. Do the materials and the teacher's presentation avoid loaded words (savage, buck, chief, squaw) and an insensitive or offensive tone?

6. Are regional, cultural, and tribal differences recognized when appropriate? As everyone knows but does not always put into practice, before the Europeans came there were no people here that called themselves "Indians." Instead, there were and still are Navajo or Menominee or Hopi, or Dakota, or Nisqually, or Tlingit, or Apache. Instead of teaching about generalized Indians or "Native Americans," study the Haida, or Cree, or Seminole.

7. Are communities presented as dynamic, evolving entities that can adapt to new conditions, migrate to new areas, and keep control of their own destinies? Too many classroom materials still present Native American traditions as rigid, fixed, and fragile. For example, some filmstrips and books may have titles like "How the Indians Lived," as though there are not any Indian people living today. In fact, over two million Native Americans live in what is now the United States, about half of them live in cities and towns and the other half on reservations or in rural areas.

8. Are historical anachronisms present? The groups living here prior to the 1540's did not have horses, glass beads, wheat, or wagons. Can your students determine why that is the case and do they understand that these items were all introduced by Europeans?

9. Are captions and illustrations specific and appropriate for a specific time and place? (Wrapped skirts in the Arctic, feather bonnets in the North Pacific Coast, or totem poles in the Plains never existed.) Are individuals identified by name when possible?

10. Are the different Native Americans viewed as heirs of a dynamic historical tradition extending back before contact with Europeans? Similarly, Native American groups should not be equated with other ethnic minorities. The fact is that Native American tribes--by treaty rights--own their own lands and have other rights that are unique to the descendants of the real Natives of America, because they are that. No other minority within the United States is in a similar legal position. Native peoples view themselves as separate nations within a nation. U.S. laws and treaties, officially endorsed by U.S. presidents and the Congress, confirm that status.

11. If you have Native American children in your class, do not assume that they know all about their own ancestry and the ancestry of all Native Americans. All children including Native American children need to be taught about the Native American heritage, which, in a very real

sense, is the heritage of everybody living in the U.S. today. Culture and ideas, after all, are learned and not inherent from birth.

References:

"Checklist," *Meeting Ground*, Biannual Newsletter of the D'Archy McNickle Center, Issue 23, Summer 1990. The Newberry Library, 60 West Walton Street, Chicago, Illinois 60610-3380. ("Checklist" was based on criteria provided by Center advisor, Cheryl Metoyer-Duran, UCLA School of Library and Information Sciences.)

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Kaupp, Ann. "Toward Gender and Ethnic Equity in Museums." *Four Star*, Newsletter for the Smithsonian Institution Women's Council 10(2), Summer 1990.

JoAnne Lanouette

* * * *

NOW AVAILABLE

The proceedings from the 1988 and 1989 annual conferences--*Qualitative Research in Education: Substance, Methods, Experience and Qualitative Research in Education: Teaching and Learning Qualitative Traditions* are available for purchase at \$9.00 (U.S.) and \$12.00 (International-Air Mail) per copy. Order through Judith Preissle-Goetz, Tucker Hall 413, University of Georgia, Athens, GA 30602. Write checks payable to the University of Georgia.

SPICE

The Stanford Program on International and Cross-Cultural Education (SPICE) represents a long-term effort by Stanford University to improve international and cross-cultural education in elementary and secondary schools. The program traces its origins to 1973, when a project was initiated to upgrade teaching about the People's Republic of China. By 1976, parallel projects on Japan, Africa, and Latin America had been added, and, together with the China Project, became the nucleus of SPICE. The International Security and Arms Control Project (ISAAC), the Soviet Union and Eastern Europe Project, and the Western Europe Project have been subsequently added.

Spice is committed to the improvement of the international dimension of elementary and secondary education in the U.S. through the development of curriculum and staff development programs of high quality. SPICE materials are reviewed by scholars and tested extensively in classrooms. Most of the reasonably priced materials consist of small booklets and slides. They are ideal for supplementing units in a wide variety of classes, primarily in the social studies and language arts.

A non-profit educational program of Stanford University, SPICE receives funding from the U.S. Department of Education, the Stanford Institute for International Studies, and several private foundations. For an up-to-date catalog, write:

SPICE

Littlefield Center, Room 14
300 Lasuen Street
Stanford University
Stanford, CA 94305-5013

NEW CURRICULA ON NATIVE AMERICANS

In reassessing curriculum offerings, teachers may wish to order some new, highly recommended materials. We also note the recent publication *After Columbus: The Smithsonian Chronicle of the North American Indians* by Herman Viola (Smithsonian Books), 1990, available from your local bookstore.

Teaching About Native Americans. National Council for the Social Studies, Bulletin No. 84, 1990. National Council for the Social Studies, 3501 Newark St., N.W., Washington, D.C. 20016-3167; (202) 966-7840. \$10.95 (soft cover).

Lesson plans cover the following topics: environment and resources, culture and diversity, change and adaptation, conflict and discrimination, and current issues for Native Americans. The last section, "Resources for Teachers and Students," includes criteria for evaluating educational materials and an "Indian Awareness Inventory" of 40 true or false questions.

* * * *

The Native People of the Northeast Woodlands. An elementary curriculum produced by the National Museum of the American Indian, 1989. National Museum of the American Indian, Broadway at 155th St., New York, NY 10031; (202) 283-2420. \$35.00

The Delaware (Lenape) and the Six Nations Iroquois are the focus of this curriculum in a three-ring binder notebook. Forty-seven classroom activities are found in lesson plans whose topics are: cultural diversity and environment, early times, language, hunting and fishing, harvest, family, oral traditions, clothing, government, life today. A resource section provides information on publications, audio-visuals, powwows, Native American supplies, and governments today.

* * * *

Keepers of the Earth: Native American Stories and Environmental Activities for Children by Michael J. Caduto and Joseph Bruchac, 1989. Fulcrum Publishing, Golden, Colorado. \$19.95 (hard cover). Special discounts available. Teacher's Guide also available. Primarily for kindergarten through sixth grade.

Winner of the New York State Outdoor Education Association Annual Art and Literary Award (1990), this book combines Native American stories and environmental education activities to help students understand all aspects of the earth and to teach "positive social and environmental skills."

* * * *

The Native American Sourcebook: A Teacher's Resource of New England Native Peoples by Barbara Robinson. Concord Museum, P.O. Box 146, Concord, MA 01742. Grades 1 & 2. \$15 plus \$3 postage and handling.

The sourcebook contains curriculum materials, teacher's guides, background information, activity sheets, extensive bibliography, and resource listing.

* * * *

The Wabanakis of Maine and the Maritimes. A resource book about Penobscot, Passamaquoddy, Maliseet, Micmac, and Abenaki Indians. American Friends Service Committee, 1989. Grades 4 through 8. Maine Indian Program, P.O. Box 1096, Bath, ME 04530. \$15.00.

This 506 page resource manual covers Wabanaki history, government and politics, land and treaties, effects of the American Revolution, Indian-White relations, and contemporary life. Also included are 180 pages of lesson plans and readings of Wabanaki legends, stories from or about different periods in history from 1400 to the 1920's, and interviews with Wabanaki people today. The section, "Fact Sheets," includes information about material culture; political, social, and spiritual life; games and crafts, as well as a resource listing and bibliography.

THE PUBLIC EDUCATION INITIATIVE AND THE SAA

The Society for American Archaeology's (SAA) Committee on Public Education is creating a network of active, committed, and energetic individuals throughout North America (and reaching out to interested colleagues abroad, as well). Members of the network will work together to develop, coordinate, and promote public education strategies related to archeology and the preservation of cultural heritage resources.

The SAA views public education as the most effective long-range solution to the pressing problem of site destruction. Additionally the SAA considers that a positive message about what can be learned about other cultures and ourselves from careful archaeological research, as well as about why we should care about preservation of cultural heritage, must be conveyed in a targeted way to a variety of special interest groups from school children to collectors.

The SAA believes that those who study culture history through archaeology have a responsibility to share information about their findings and methods. Professionals must not shut the majority of the population out of the process with the implied message, "Don't touch. Archaeological resources must be protected for the professional archaeologists." Rather, we must encourage the natural curiosity of children and adults to learn about and preserve things past and different, yet connected.

Through the public education effort, the SAA wants to awaken in the public an appreciation for and an understanding of the importance of research and to convey the non-renewable nature of the resources, while exploring ways to allow greater enjoyment of them by everyone. The SAA wants to contribute to a fostering of respect for one's own cultural heritage and for the heritage of others.

The SAA Committee on Public Education has set an ambitious agenda for its first year and is establishing an informal quarterly newsletter to communicate with the growing network about current projects

and new resources. The committee is promoting the new SAA associate membership for avocational societies, teachers, and others interested in archaeology. Several projects are underway for the 1991 SAA Annual Meeting in New Orleans, including public sessions on archaeology, a session for archaeologists on writing for the public and a teacher workshop on archaeology in the classroom. Long-range goals include evaluation and development of curriculum materials. The committee is coordinating with other professional societies, including the SAA, in an inter-society work group to coordinate current and future projects.

The SAA welcomes the participation of AAA members in the SAA public education network. To receive the newsletter, send your name and address to: Dr. Edward Friedman, Chair, Committee on Public Education, Bureau of Reclamation, Denver Federal Center, PO Box 25007, Denver, Colorado 80225-0007, Attention: D-5530. Please indicate also if you would like to receive "Actions for the '90s," the executive summary of the SAA Save the Past for the Future project. Any additional comments or information about your experiences in communicating with the public about archaeology are welcome.

Edward Friedman
Phyllis Messenger
Committee on Public Education
Society for American Archaeology

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MANY THANKS to those of you who responded to our call for educational materials for the American Anthropological Association Task Force on the Teaching of Anthropology. At the forthcoming November annual meeting of the American Anthropological Association, the Task Force will be discussing various ways to disseminate information on teaching resources.

TEACHERS CREATE CLASSROOM VIDEOS WITH D.E.R.

Documentary Educational Resources (DER) is a non-profit educational organization in Watertown, Massachusetts dedicated to producing and distributing anthropology films and videos. Written texts and study guides accompany many of the films, which have been used in anthropology classes throughout the U.S. and abroad. Readers may be familiar with our collection, especially John Marshall's series on the !Kung San and Timothy Asch and Napoleon Chagnon's films on the Yanomamo.

In 1986-88, DER received an incentive award from the Massachusetts Council on the Arts and Humanities (now the Massachusetts Cultural Council). The award was for two purposes: first, to expand our market into pre-collegiate classrooms, and, second, to make age- and content-appropriate videos for classroom use. We met our first goal through familiarizing teachers with our collection by attending social studies, library, and independent school conferences; by advertising in journals; and by visiting numerous schools through the commonwealth. These interactions also enabled us to assess areas in which teachers needed new materials.

Our second purpose, to make classroom videos, was implemented with the full permission of the original filmmakers. Teachers in two local school systems worked with us, and now, as a result of this

collaboration, we have three new videos appropriate for elementary and secondary use in our collection: "The !Kung San: Traditional Life" (26 min.), "The !Kung San: Resettle-ment" (28 min.), and "Yanomamo of the Orinoco" (29 min.). The updated videos on the !Kung were prepared by Sue Marshall Cabezas, co-producer of "N!ai, the Story of a !Kung Woman," and by Eileen Sullivan, curriculum co-ordinator for Acton, Massachusetts Public Schools. Geography teachers Maureen Moran and John Daly at Wayland Junior High and DER's Judith Nierenberg, a former teacher, produced the Yanomamo video and study guide that focuses on land use and problems the Indians face in the rainforest.

We have attempted to expand this project in the Greater Boston area and have located teachers in seven more school systems who would like to work with us. Maureen Moran

sees this project as a model for other teachers who want to have more input into the materials that they bring into their classroom. We hope to find alternate sources of funding to continue this project as the Massachusetts Cultural Council has experienced enormous budget cuts. At present we are working on a large scale film production on the !Kung, which has taken priority.

For further information about the new videos or any of the titles in

our collection please contact: DER, 101 Morse St., Watertown, MA 02172; (617) 926-0491, FAX (617) 926-9519. All programs are available for purchase or rental; we have a free preview policy.

Judith Nierenberg
Documentary Educational Resources



TEACHING RESOURCES FROM THE SOCIAL SCIENCE EDUCATION CONSORTIUM

The Social Science Education Consortium is a not-for-profit educational organization with headquarters in Boulder, Colorado. The SSEC, which is dedicated to the improvement of social studies/social science education at all levels, conducts a wide range of activities. Among these are:

--An annual conference on a pertinent or timely topic of interest to social scientists and educators; the 1990 conference looked at "Teaching and Learning about the Globalization of the World."

--Dissemination of information on new developments in social science education, with recent activities on science-technology-society education.

--Teaching training, including an NEH-sponsored summer institute using a humanities approach to teach about the early national period in U.S. history.

--Curriculum development.

A small sampling of the products developed and published by the SSEC is described below.

A Humanities Approach to U.S. History: Activities and Resources for Secondary Teachers (order no. 348-9; \$21.95) presents 30 activities taking an integrated approach to U.S. history with activities on art, music, architecture, literature, and tasks of daily life. Source material is abundant. A companion volume, A Humanities Approach to Early National U.S. History: Activities and Resources for the Elementary School Teacher (order no. 307-1; \$14.95), presents 22 activities that help fifth-grade students understand the colonial and early national periods from a humanities perspective.

Immigration: Pluralism and National Identity (order no. 332-2; \$3.00) is a student booklet that examines immigration from various perspectives: why immigrants chose to come to the United States in the late 19th

and early 20th centuries, the circumstances in which they lived and worked after coming here, and how immigrants and others viewed the process of "Americanization." Past and present positions on immigration policy are discussed.

Global Issues in the Elementary Classroom (order no. 322-5; \$21.95) and Global Issues in the Intermediate Classroom (order no. 323-3; \$21.95) each contain 20+ ready-to-use lessons organized into five sections: Introducing Global Awareness, Studying Human Values, Studying Global Systems, Studying Global Issues and Problems, and Studying Global History. Varied teaching strategies are used to help students explore such topics as toys and folk tales, holidays, school rules, inventions, holidays, religion and values, and the Nobel Peace Prize. A companion volume, Global Issues: Activities and Resources for the High School Teacher (order no. 312-8; \$21.95) focuses more specifically on contemporary issues (e.g., world trade, energy and natural resources, global conflict, human rights).

A Look at Japanese Culture Through the Family (order no. 349-7; \$9.95) invites students to use case studies of family life in Japan to make hypotheses about the traditions, social institutions, and values of the Japanese people. The 33 case studies, written by teachers who spent one-and two-day home stays with rural and urban families, provide a rich array of data on Japanese life. A related volume, Japan in the Classroom: Elementary and Secondary Activities (order no. 318-7; \$16.95) presents 18 activities on such topics as Japanese poetry and proverbs, Japanese history, and economic development.

Teaching About Korea: Elementary and Secondary Activities (order no. 309-8; \$16.95) provides 18 activities teachers can use to teach about Korean history, Korean homes and food, Korean folklore and poetry, and Koreans in America.

Activities for Teaching Russian and Soviet Studies in the High School (order no. 328-

4; \$21.95) intends to enhance student understanding of Russian and Soviet culture and to motivate students to want to learn more. Among the topics explored are changes in Russian life under Tsar Peter the Great, the frontier in Soviet and American thought, and collectivized agriculture. Significant attention is given to Russian and Soviet literature. A related teacher background piece is Studying Russian and Soviet History (order no. 317-9; \$9.95) which provides insights into Russian and Soviet history from the earliest days to the present. For each period covered, the book also provides a rich bibliographic essay.

For additional information about the SSEC's activities and publications, contact the SSEC, 3300 Mitchell Lane, Suite 240, Boulder, CO 80301-2272 (303) 492-8154.

Laurel R. Singleton
Social Science Education
Consortium, Inc.

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SMITHSONIAN RESOURCE GUIDE FOR TEACHERS

The Smithsonian Institution's Office of Elementary and Secondary Education has produced *Resource Guide for Teachers: Educational Materials Available from the Smithsonian, National Gallery of Art, and the John F. Kennedy Center for the Performing Arts*. The guide is organized by topics such as American Studies, Language Arts, Sciences, World Cultures.

The cost of the 93-page spiral-bound booklet is \$4.95, which covers the cost of printing. To order, make your check out to the Smithsonian Institution-OESE and send it to: Smithsonian Institution, Department 0561, Washington, D.C. 20073-0561.

TEACHER SYMPOSIUM ON NATIVE AMERICANS

The National Museum of Natural History will be sponsoring a two-day symposium on Teaching About Native Americans for metropolitan Washington area elementary school teachers, March 8 & 9, 1991. In the lectures and workshops, teachers will be introduced to past and contemporary life of Native Americans, with emphasis on the Northeast Woodlands and local Indians; new curricula, three of which are described on page 10 of this issue; and Native American educators and scholars who will offer suggestions on how to recognize and deal with stereotypes in teaching materials. Area teachers interested in receiving more information should write to: Ann Kaupp, Department of Anthropology, National Museum of Natural History, Washington, D.C. 20560.

HANDBOOK OF NORTH AMERICAN INDIANS

The Smithsonian's *Handbook of North American Indians*, general editor William C. Sturtevant, is an encyclopedia summarizing knowledge about all Native peoples north of Meso-america. Scholars contribute to the volume chapters that cover human biology, prehistory, ethnology, linguistics, and history. Nine of the 20 volumes thus far completed are: Volume 15: Northeast, 1979 (\$27.00); Volume 8: California, 1978 (\$25.00); Volume 9: Southwest (Puebloan peoples and Southwest prehistory and history), 1980 (\$23.00); Volume 6: Subarctic, 1981 (\$25.00); Volume 10: Southwest (non-Puebloan peoples), 1983 (\$25.00); and Volume 5: Arctic, 1984 (\$29.00); Volume 11: Great Basin, 1986 (\$27.00); Volume 4: History of Indian-White Relations, 1988 (\$47.00); and Volume 7: Northwest Coast, 1990 (\$38.00). Write to: S.I. Press, Department 900, Blue Ridge Summit, PA 17214; (717) 794-2148. Prepaid orders will not be charged for postage and handling.

("Thanksgiving" continued from p. 6)

contrary! The *Pilgrims* had literally never seen "such a feast," since all foods mentioned are exclusively indigenous to the Americas and had been provided, or so legend has it, by the local tribe.

Thanksgiving could be a time for appreciating Native American peoples as they were and as they are, not as either the Pilgrims or their descendant bureaucrats might wish them to be. If there *was* really a Plymouth Thanksgiving dinner with Native Americans in attendance as either guests or hosts, then the event was rare indeed. Pilgrims generally considered Indians to be devils in disguise, and treated them as such. And if those hypothetical Indians participating in that hypothetical feast thought that all was well and were thankful in the expectation of a peaceful future, they were sadly mistaken. In the ensuing months and years they would die from European diseases, suffer the theft of their lands and property and the near eradication of their religion and their language, and be driven to the brink of extinction. Thanksgiving, like much of American history, is complex, multi-faceted, and will not bear too close a scrutiny without revealing a less than heroic aspect. Knowing the truth about Thanksgiving, both its proud and its shameful motivations and history, might well benefit contemporary children. But the glib retelling of an ethnocentric and self-serving falsehood does no one any good.

Parents' major responsibility, of course, resides in the home. From the earliest possible age, children must be made aware that many people are wrong-headed about not only Native Americans, but about cultural pluralism in general. Children must be encouraged to articulate any questions they might have about "other" people, and "minority" children must be given ways in which to insulate themselves from real or implied insults, epithets, slights or negative stereotypes. "Survival humor" must be developed and positive models must consciously and unconsciously be available and obvious. Sadly, children must learn *not* to trust uncritically.

Protecting children from racism is every bit as important as insuring that they avoid playing with electrical sockets. Poison is poison, and ingrained oppressive cultural attitudes are at least as hard to antidote, once implanted, as are imbibed cleaning fluids. No one gains by allowing an inequitable and discriminatory status quo to persist. It's worth being a pain in the neck about.

Michael Dorris
Adjunct Professor
Native Studies Department
Dartmouth College

[This article was excerpted from *Interracial Books for Children Bulletin*, vol. 9, no. 7, 1978.]

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SMITHSONIAN EXPEDITION TO JAMAICA, February 22-March 4, 1991

Help document Pagwa, a Hindu celebration of the winter harvest and the renewal of life. Introduced to Jamaica by East Indians who came to the island as indentured laborers between 1845 and 1917, Pagwa combines music, song, dance, and offerings.

This Smithsonian expedition to Kingston will involve interviewing local residents, conducting library research for background material, or assisting with preparations for Pagwa to learn more about Jamaica's Indian heritage. Expedition leaders will be Olive Lewin, Executive Director, Jamaican Institute of Folk Culture, and John Homiak, cultural anthropologist, Department of Anthropology, National Museum of Natural History, Smithsonian Institution.

For more information, write Smithsonian Research Expeditions, 490 L'Enfant Plaze, S.W., Suite 4210, Washington, D.C. 22024, or call (202) 357-1350.

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ANTHRO.NOTES, a National Museum of Natural History Bulletin for Teachers, is published free-of-charge three times a year (fall, winter, and spring). *Anthro.Notes* was originally part of the George Washington University/Smithsonian Institution Anthropology for Teachers Program funded by the National Science Foundation. To be added to the mailing list, write: P. Ann Kaupp, Public Information Office, Department of Anthropology, National Museum of Natural History, Smithsonian Institution, Washington, DC 20560.

This newsletter may be reproduced and distributed free-of-charge by classroom teachers for educational purposes.

Anthro.Notes Staff: P. Ann Kaupp, Ruth O. Selig,
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Anthro Notes

National Museum of Natural History Bulletin for Teachers

Vol. 13 No. 1 Winter 1991

POLITICS AND PROBLEMS OF GORILLA AND CHIMP CONSERVATION IN AFRICA

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LIBRARIES

Of all the world's endangered species, gorillas and chimpanzees possibly receive the most sympathy, and the widest public support for their conservation. In large part, public empathy with these animals stems from the long-term efforts of Jane Goodall, Dian Fossey, and other primatologists who have demonstrated the close kinship between these animals and ourselves and made us aware of the dangers these primates face in a developing Africa. While elephant conservation in Zimbabwe has resulted in large population increases in some areas, the number of apes has not increased despite greater local and worldwide conservation efforts throughout the 1980's. Why are there only 310 mountain gorillas left in the wild?

Why is ape conservation so difficult?

Anthropologists are deeply involved in primate conservation efforts. As Vernon Reynolds notes in a recent issue of *Anthropology Today*, we are responsible for the survival of chimpanzees (and other apes) in the wild if only because "they have helped us. Simply by existing, chimpanzees speak to us of our evolution, of our past, a past our ancestors shared with theirs. Thousands of Ph.D. students owe their thinking to chimpanzees. Careers have been, and continue to be, built on chimpanzees....It is time we started to acknowledge the debt, to do something for them in return" (1990:3).



Ape Conservation and Medical Research

Ironically, one of the greatest obstacles to conservation efforts for great apes derives from the very same feature that has brought them within the anthropologist's orbit, namely, their close biological relationship to ourselves (they share 99% of our genes). This relationship ensures their susceptibility to many of the same disease organisms as humans. Not only does this susceptibility make apes harder to protect in the wild, but it makes them commercially valuable in the developed world as subjects for all kinds of experimentation. Geza Teleki, an anthropologist and Chairman of the Committee for Conservation and Care of Chimpanzees, told us that "even though it is illegal to capture and sell wild chimpanzees, the market demand for medical experimentation is so great that a dealer in a developed country can command an asking price of between \$10,000 and \$25,000 for a single chimpanzee. The African who caught the chimpanzee illegally might receive a payment of \$30 to \$50, equal to one to two month's wages, so that, even with shipping expenses, the profit margins are in the same league as those of the international trade in illegal drugs. How can African governments defend their endangered wildlife against this overwhelming economic incentive from the developed world?"

The conservation effort for the great apes is two-pronged: protect the remaining populations of wild apes from local encroachment, and at the same time attack the international trade in wild-caught animals. Teleki, who has worked closely for many years with Jane Goodall, is particularly involved in the attack on the international trade. One week he might be testifying in Europe against an illegal dealer caught with a shipment of wild chimpanzees. The next week he might be in Washington testifying before a congressional committee on the relatively small numbers of chimpanzees that remain in the wild and on the need for an international trade ban (Teleki in Heltne and Marquardt, 1989:312-353).

Teleki's work also involves talking with the medical establishment to help ensure that

their great apes come from already-established captive breeding colonies and not from wild populations. DNA-"fingerprinting" of chimpanzees can demonstrate that particular animals come from a breeding colony and are not "illegal." The high price for chimpanzees also helps in his effort by ensuring that captive animals are housed as humanely as possible, since no one wants to lose a \$10,000 item of research "equipment."

In the recent National Geographic Film on Jane Goodall, produced by Judy Dwan Hallet, we see how painful it is for those who have lived with chimpanzees in the wild to visit them in captivity. Yet both Teleki and Goodall believe, for the ultimate conservation of these animals, it is important to work with the medical establishment as much as possible, since medical research drives much of the deliberate poaching of wild chimpanzees.

Forest Conservation in Africa

Human population is expanding in most African countries at rates of between three and four percent per year, doubling the population every generation. The demands of an expanding population for food and fuel are resulting in widespread destruction of wild habitats, particularly those forested habitats that harbor the remaining ape populations. Furthermore, the need to generate hard currency reserves through the export of timber or cash crops has seriously depleted forest areas, thus reducing the land available for local subsistence.

Many African countries inherited from colonialism large tracts of undeveloped land set aside as game reserves. In several cases, notably in the Virunga National Park in Zaire, these tracts were not uninhabited when the reserve was created, but were home to indigenous peoples who were resettled outside their boundaries. When cash-poor African governments succeeded colonial ones, they found themselves in the difficult position of defending these reserves against the legitimate land requirements of their own people. In many cases, the people who run the central government of an African country and those who live in a distant rural area in close

proximity to wild gorillas or chimpanzees do not share the same language or culture. Decisions made in the capital may not take local needs and interests into account and may be difficult to enforce at a distance, across cultural and linguistic boundaries. In order for a conservation effort to succeed, both the national government and the local population must support it.

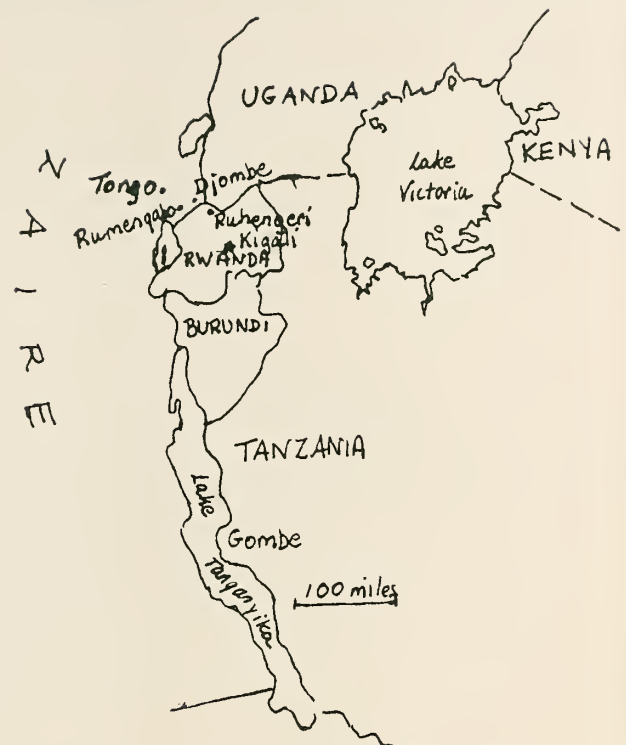
For many Africans the special land rights demanded for endangered species by western conservationists have sometimes been seen as a new form of imperialism, in which Africa will continue to supply the raw material for western needs, albeit spiritual in nature rather than material. The western search for self-renewal in a pristine wilderness, the quest for a deeper knowledge of the self in a confrontation with the primitive or animal "other" is not universally shared (see Haraway, 1989). How, then, can conserving apes benefit Africans and African countries directly?

Over the last decade most primatologists have come to accept that conservation efforts will succeed only if such efforts provide direct and visible economic benefits to both the local people and the national government. How can wild apes replace local food and fuel or hard currency earned from timber operations? The answer has been tourism. For some African countries (Zimbabwe, Botswana, Kenya, Tanzania), with large, easily accessible and relatively well-maintained savanna game reserves, tourism is the second or even the first source of foreign currency. In some cases, such as at Amboseli Park in Kenya, the cooperation of local people, in this case the Maasai, has been ensured, or at least made likely, through their direct participation in providing housing, food, and guides for foreign tourists. Can this model be applied to forest reserves and their elusive animals?

Gorillas: Tourism and Conservation

Rwanda

The most financially successful and well-known tourist experience in an African forest is the mountain gorilla project in the Parc National des Volcans, Rwanda. Last year about 6500 tourists climbed the steep slopes of the Virunga volcanoes in search of



a one-hour encounter with our largest relative. Each of the four habituated gorilla groups is visited by up to five tourists daily. Gorilla tourism is not for the tourist on a shoestring but is designed to extract the maximum foreign currency from each visitor. Local people may have cornered some jobs as guards and guides, but the tourist dollars appeared to be flowing primarily to the capital. First, the tourist pays \$160 in entrance and gorilla visit fees directly to the park office. The base of the nearest gorilla visit site is at least two to three hours drive from the Kigali, the capital, in an expensive private taxi or rental car; inexpensive local busses drop you about ten miles from the mountain in the nearest town of Ruhengeri.

Since tours leave early in the morning to catch the gorillas during their most active period, most tourists also end up paying, in the requisite foreign currency, for at least two nights lodging in Rwanda. The total tab is usually about \$400-\$500 each; even the most determined French-speaking tourist in good physical shape is unlikely to get away for less than \$300. If 6500 tourists spend at

least \$500 each in Rwanda, the total foreign currency revenue generated by gorilla tourism is more than \$3.2 million dollars. This represents a minimum of \$10,000 per "wild" gorilla. Gorilla tourist dollars, moreover, are a perennial resource rather than a one-time windfall. Not surprisingly, the government of Rwanda has strongly supported the development of gorilla tourism, accompanied by anti-poaching and education measures.

The popularity of gorilla tourism is extraordinary given its physical demands. Visitors to the clouded forest of the Virungas cannot experience the landscape or its animals from the comfort of a zebra-striped safari van. Instead the trip is exhausting and often uncomfortable, and the contact with the forest and its inhabitants far more direct than the usual savanna bus ride, but perhaps, for that very reason, more rewarding for the nature pilgrim.

In 1985, Alison Brooks and Catherine Smith (wife of the co-author) visited the gorillas of Mt. Visoke. Although we had spent the previous two months excavating various levels of 100 foot cliffs, at an altitude of 3000 feet, we were quite unprepared for four or more hours of extreme physical exertion at 9000 ft. During the climb to the nests where our gorilla group had spent the previous night, we began to understand why gorillas have such strong arms. For the most part, we progressed by pulling ourselves upwards and forward over a tangled wet and slippery mass of tree roots, vines and stinging nettles. In about three hours of constant motion, our feet almost never touched the ground. Once we located the nests, distinguished by the piles of feces gorillas always deposit in their nests before moving on, Catherine Smith immediately slipped on the wet leaves and fell in. From the nests, the trail was much clearer, although still covered in stinging nettles and definitely not designed for hairless bipeds. About an hour later, we finally made contact with the gorilla group.

Mountain gorillas are ideal subjects for forest tourism, since they are very large, live in groups, spend most of their time on the ground, move slowly, and rarely travel

more than a few miles per day. Their energy budget dictates that they spend most of the day lying around digesting their relatively low-quality diet of leaves and shoots. Many tourists have made arduous climbs of five or more hours only to watch gorillas sleep. We were lucky; ours were just finishing off their morning meal of stinging nettle tops.

Gorilla Conservation in Zaire

Zaire

In Zaire, a country 90 times the size of Rwanda, conservation efforts are strongly supported at the national level, but the local people charged with carrying out the government's edicts are much further removed, culturally, linguistically, and physically, from the government seat in Kinshasa 1500 km. west of the Virungas.

Four habituated gorilla groups at two sites in the Parc National des Virungas (Djombe and Rumangabo), which abuts Rwanda's Parc des Volcans, are visited by up to six tourists daily for one hour. At \$150 apiece in park fees, plus substantial costs for transportation by a tour operator, gorilla tourists in Zaire provide a significant source of foreign income to the national government.

When we visited habituated groups in Zaire in 1986, 1988, and 1990, the park guards were increasingly proud of their conservation efforts as well as of their roles as brokers between gorillas and western tourists. Over the years, the gorillas became increasingly "habituated," rarely charging or fleeing from the daily scrutiny of strangers, while the tourists were taught how to behave like submissive gorillas, moving only slowly and quietly, hunched down and grunting. The EEC and Frankfurt Zoological Society provided incentives directly to local personnel, both in bonuses and in durable equipment (vehicles, two-way radios, on-site office buildings, etc.). In addition, the largest tour operator at Djombe was a local Zairois.

As in Rwanda, however, the rich volcanic soils immediately surrounding the small gorilla refuges in Zaire are farmed

(continued on p. 13)

AAA TASK FORCE SUMMARY REPORT

The American Anthropological Association (AAA) Task Force on The Teaching of Anthropology was created in 1988 to encourage the teaching of anthropology in North American schools--from elementary school through the university. The Task Force was created in the belief that enhancing the role of anthropology in our education system will not only strengthen education but contribute substantially to the public awareness of anthropology and the creation of a more positive image of the profession.

The Task Force, co-chaired by Professors Jane White (University of Maryland/Baltimore County) and Patricia J. Higgins (SUNY-Plattsburgh), has been divided into four working committees: Research, Guidelines for Teaching Anthropology, Curriculum Materials, and Outreach. The committee on Research recently submitted a report assessing the status of precollege anthropology and the place of anthropology in preservice teacher training. A copy of this report, written by Paul Erickson, with contributions from Patricia Rice, Paul Erickson, Sally Plouffe and Serena Nanda, is now available from Professor Erickson, Department of Anthropology, Saint Mary's University, Halifax, NS, B3H 3C3, Canada. A summary of the report is reprinted below.

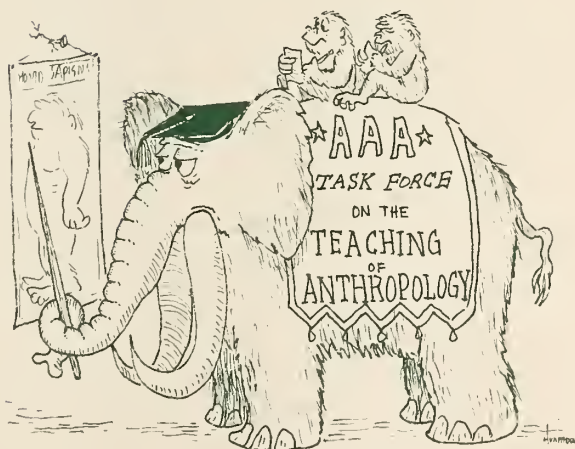
INTERIM REPORT ON PRECOLLEGE ANTHROPOLOGY: A SUMMARY

The research for this Report on Precollege Anthropology was based on mail and telephone surveys of hundreds of education officials, schools, and teachers in every Canadian Province and American State. For example, a letter was sent to every teacher training college and university in Canada and to a selected sample of teacher training schools in every state as well as the District of Columbia, Puerto Rico, and Guam. Letters were sent to 252 schools, 47 in Canada and 205 in the United States. Seventy-five (30%) responded, 25 from Canada (53%), and 50 (24%) from the United States. Both groups were combined for data analysis. Teacher certification and teacher

training were investigated as well as how, where, and why precollege anthropology is actually being taught. The report states that an estimated 43% of states who responded already require some kind of anthropology for teacher certification. Furthermore, thirty-eight percent (38%) of the education degree-granting schools require future teachers to be exposed to anthropology; 5% recommend anthropology; and 38% make anthropology available as an elective. The rest lack anthropology altogether.

Anthropology figures about equally in the training of both elementary and secondary teachers. Most of this anthropology is cultural anthropology, with archaeological, biological, and linguistic anthropology is rarely mentioned by our respondents. The prominence of anthropology in education schools depends less on schools' size and geographical location than on the presence of motivated faculty members. We were reminded that anthropology cannot be taught where there are no anthropologists on campus.

(continued on next page)



Fifty-six percent (56%) of the responding Provinces and states claim to allow anthropology as a local school or district option, while 16% claim to disallow it. The rest do not have relevant information or did not respond. Two states, Minnesota and New Jersey, come close to requiring anthropology for high school graduation.

Where anthropology is a local option, the percentage of schools in the states actually teaching anthropology is highly variable, ranging from 40% in Alaska to 3% in North Dakota. The percentage of students actually enrolled in anthropology courses is consistently very low, reaching a high of only 1% in Alaska and Connecticut. The caliber of precollege anthropology curricula varies extremely. No Province or state responding mandates a specific anthropology textbook, and many teachers are unhappy with the textbooks they are using.

In classrooms, anthropology appears at both the elementary and secondary levels. It is taught by name mainly at the secondary (high school) level, where it competes for resources with other "non-essential" subjects. In elementary schools, anthropology is disguised as social studies so that some teachers are teaching anthropology without knowing it!

In summary, a surprising amount of precollege anthropology is already "out there" in North American schools. Building on these existing strengths and networking with already-motivated teachers is preferable to foisting college goals and methods on precollege classrooms.

We are struck by the gap between the relatively large number of opportunities for precollege anthropology and the relatively small number of individuals taking advantage of them. At Brigham Young University, for example, 100-150 education students enroll in recommended Anthropology 101 each year, but only one student majors in anthropology education. This situation is part of the self-perpetuating cycle in which little precollege anthropology is taught because there are few teachers of anthropology, and there are few anthropology teachers because little precollege anthropology is offered.

Students and teachers will not be attracted to anthropology unless they know what anthropology is. Therefore, the fate of precollege anthropology is linked to college and university anthropology and to public awareness and approval of anthropology outside schools. Strengthening any one of these links will eventually strengthen them all. There is special strength in teaching anthropology to young people, who can benefit from it for the rest of their lives; or teaching anthropology to teachers, who can pass it on to students throughout the rest of their teaching careers.

Paul A. Erickson, Chair
Committee on Research
AAA Task Force on Teaching
Anthropology

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ARCHAEOLOGY MAGAZINE

The January/February 1991 issue of *Archaeology* includes an excellent special section on Archaeology in the Classroom. It includes a feature article by K.C. Smith on the value of teaching archaeology and the increasing cooperation between archaeologists and educators and; a sampler of innovative archaeology programs for young people around the country; and a Resource Guide for Teachers listing newsletters and publications, curriculum materials, organizations to contact, and fieldwork opportunities. *Anthro. Notes* editors strongly recommend our readers obtain this useful issue by sending \$4.50 to *Archaeology*, P.O. Box 50260, Boulder, CO 80321; (800) 289-0419.

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FREE LECTURE

"The Scale of the Universe in Space and Time" is a fascinating perspective on the human condition. Saturday, May 4, 9:30 a.m., at the Einstein Planetarium, National Air and Space Museum. Teachers are encouraged to attend.

TEACHER'S CORNER: CHURCH ETHNOGRAPHIES: A WEST TEXAS CASE STUDY

Religion often guides human behavior, regulates interactions between human beings and their environment, and even guides specific social ends. Because religion is a complex blend of behaviors, material items, beliefs, and people, studying churches can be an ideal setting for the study of the total integration of culture, a setting in which students can bring their own knowledge and background into play.

At the University of Texas of the Permian Basin, I assigned my undergraduate students to research projects focussing on individual churches encompassing a wide range of socio-economic and ethnic groups present in the region. In order to gain an idea of regular church practice, students attended an assigned church for at least three Sunday morning services and also interviewed the minister. It was essential that students first asked consent of the minister before attending services, and that each student made clear his or her role as a student observer rather than as a potential church member.

In order to introduce students to techniques of participant observation, I gave the class a basic framework of observations to make. This framework included:

- 1) the physical layout and material culture of the service;
- 2) the human dimension of the service, including the number and ethnic identity of people attending, the relative proportions of male and female participants, young and old, majority and minority groups, and the clustering of groups by age or sex; and
- 3) the service itself, including the kinds of music and musicians, the specialized personnel, time of day, and the style of audience participation. Finally, questions were offered for interviewing the minister, such as asking his or her reasons for becoming a minister and his or her education and training.



Students carefully recorded observations in a "field diary," gathering data from which they could fill out the questionnaire. Next students used their data as the basis for writing a church ethnography, a descriptive narrative essay of both the church and the community of which it was a part. Since the entire class was studying various churches within a single denomination (Baptist), I distributed all the ethnographies to the class to read and discuss. Were there differences among these churches? If not, why not? If there were differences, what were they? What factors accounted

for these differences? Such questions enabled the students to incorporate knowledge acquired through participant observation as well as their own background

knowledge as members of the general society.

The project, focusing on churches, congregants, and small communities, contributed to student education in several ways. By assigning students to churches other than their own, they were introduced to different ethnic groups and social classes. Many students were simply unaware of minority communities beyond brief encounters. In the West Texas Baptist project, one female white student initially refused to attend services at the black church to which she had been assigned until she could persuade her boyfriend to accompany her. The classroom discussion that resulted did more to clarify the nature of stereotypes and ethnic and class distinctions in our society than all the reading the students had done. Similarly, I assigned a black student to attend a wealthy, white Baptist congregation. Her discussion of her feelings and her perception of the congregants' feelings was firmly in the tradition of some of the best of humanistic introspective anthropology.

The project also contributed to the students' understanding of how anthropologists actually work. Despite our best efforts, anthropology is all too often perceived as the study of exotics, "them," rather than "us". This project showed students that anthropology is indeed relevant to our own society and that certain problems pertain to fieldwork regardless of the particular society under study. Students had problems with "nothing to see" at first and "too much to record," as they became accustomed to the ways of "their" church and then had to decide what was important to observe. In so doing, they came to realize the role of their own perceptions and biases in "objective" observation. Students came to grips, albeit in a small way, with problems of culture shock. Even Baptist students found it difficult at first to understand why church members did certain rituals in different and therefore "wrong" ways. Students from more formal church backgrounds found the spontaneity of lower-income churches "primitive" and "not real religion". And, at the end of the semester, a few students even had to face the dilemma of "going native," of

identifying too closely with "their" new culture. In one instance, a white student from a fundamentalist background, a devout member of his own church, had to come to grips with this problem when members of an Hispanic Baptist church invited him to join their church. Although he (and all students) had made it clear from the beginning of his study that he was there as an observer, rather than as a potential convert, the members of this particular church and the student had established such rapport that it seemed only natural for church members to consider him a fellow congregant.

Finally, some students learned that creativity can be an integral part of the social sciences. All too often, students learn only from reading textbooks in which information is presented in predigested categories or from experiments in which the result is a foregone conclusion. In addition to the problems mentioned above, some students found that aspects of "their" church were intriguing enough to lead to further research and observation. One education major examined the goals and values reflected in the Christian school system at "her" church, and compared them to those in public schools. Another student, interested in bilingual education, studied the role of Spanish in the Hispanic church to which she was assigned. In particular, she looked at the specific occasions in which Spanish was used, in which only English was used, and in which either language might be used, and realized that Spanish was used exclusively in prayers directed to God for personal favors.

Of course, not all students gained equally from the church observation exercise. Some were content to do the bare minimum; others left with the same prejudices about others with which they came in. Still others never saw what anthropology was all about. Nonetheless, feedback from students in the form of evaluations and informal conversations indicated that for many of them, anthropology had come alive in a way textbooks alone could not do for them. Many had struggled with the question of what to observe, and how to get along with "others," and what it felt like to be different, to be (in a very small way) in a

minority. The students had struggled with the fieldwork process and realized that it could demand of them the precision of accounting, the rigor of the "hard sciences," and as much creativity as they could muster.

QUESTIONNAIRE

(Editor's Note: The questionnaire below was developed for college students living in the midst of a heavily Baptist population. The entire class studied different churches, but all were within the Baptist denomination. Hence, this questionnaire would have to be modified if used with a class studying churches, temples, or other religious institutions in other than the Baptist tradition.)

I. Identification Information (church name, denomination, status with regard to a larger denomination, location, number of members, average attendance at weekly service, paid staff/volunteers.)

II. Material Culture Variables (predominant male and female dress, printed program, musical instruments, choir robes, choir seating, collection posting, building exterior and interior, windows, style of seating, speaking platform, sound system, flowers, flag, other decorations, church layout, crosses and other religious symbols.)

III. Ethnic/Class Variables (socio-economic status, major ethnic groups present, ethnicity of minister, language used in church, language used by congregants.)

IV. Behavioral Variables (age/gender of most people at the service; style of service, use of "amens", handclapping, interjections etc; sermon--spontaneous or planned; collection--who does it and how; childcare--is it provided, how, where, when?)

V. Ministerial Variables (full-time or part-time, ethnicity, age, education, call to preach, age at call, relatives in ministry, dress, demeanor and voice, view of own role within congregation.)

Gordon Bronitsky
Anthropologist/Consultant

SMITHSONIAN SYMPOSIUM ON AMERICAN INDIANS

Eighty-six Washington, D.C. area elementary school educators recently attended a two-day Smithsonian symposium, "Teaching About Native Americans," jointly sponsored by the Department of Anthropology and the Office of Education of the National Museum of Natural History.

The symposium offered teachers, through lectures and three workshops, an opportunity to build upon their knowledge of American Indians, to evaluate teaching curricula for accuracy and cultural sensitivity, and to learn about new activities and approaches. Indian and non-Indian presenters were experts in the fields of anthropology and Indian education and included: JoAllyn Archambault (Standing Rock Sioux), Director, American Indian Program, National Museum of Natural History; George Abrams (Seneca), Special Assistant to the Director of the George Gustav Heye Center, National Museum of the American Indian (NMAI); Judith Brundin and Johanna Gorelick with the Education Department, NMAI; Joseph Bruchac, writer and storyteller; Mitchell Bush (Onondaga), Bureau of Indian Affairs; Anita Sue Chisholm (Absentee-Shawnee), Director, American Indian Institute, University of Oklahoma; Lisa Harjo (Choctaw), Denver Indian Center; Helen Rountree, anthropologist, Old Dominion University; Linda Skinner (Choctaw), Director, Indian Education, Oklahoma State Department of Education; and Michael Tsosie (Mohave), Chairman, Colorado River Indian Tribe School Board.

The three concurrent workshops focused on three published curricula, described in the Fall 1990 issue of *Anthro.Notes*, and were taught by one of the co-authors. Teachers received a copy of all three curricula.

It was challenging to organize this symposium, but a challenge I would encourage our *Anthro.Notes* readers to try for themselves as the teachers unanimously felt the sessions invaluable to their own education and that of their present and future students.

Ann Kaupp

SUMMER FIELDWORK OPPORTUNITIES

INTRODUCTION

If you are looking for adventure and an opportunity to acquire new skills, you may want to consider becoming a member of an archeological excavation team or a scientific expedition in the United States or abroad, or participating in a unique learning experience in a museum setting. Several of the organizations listed below offer special programs for teachers and students.

You may discover within your own community fieldwork opportunities available to you. Anthropology departments of local universities and colleges, state historic preservation offices, and state archeological societies often engage in local archeological excavations and frequently accept volunteers with no previous fieldwork experience. The Archaeological Institute of America (AIA) offers a listing of state archeologists associated with the national organization as part of its yearly field school listing for the U.S. and abroad. The cost is \$10.50 for members and \$12.50 for non-members. Write: AIA, 675 Commonwealth Ave., Boston, MA 02215, or call 617-353-9361. *Archaeology* magazine, published by the AIA, features an archeology travel guide to sites open to the public in the Old World (March/April issue) and the New World (May/June issue). A field school listing is also available from the American Anthropological Association for \$5.00 for members and \$7.00 for non-members, with a self-addressed envelope with 56 cents postage. Write: AAA, 1703 New Hampshire Ave., N.W., Washington, D.C. 20009 or call (202) 232-8800.

For archeological information regarding opportunities in the Washington, D.C. metropolitan area, the Smithsonian Institution's Department of Anthropology has prepared "A Guide to Resources on Local Archeology and Indian History." The guide includes a listing of museums and organizations, anthropological and archeological societies, fieldwork opportunities, and professionals involved in local archeology and Indian history. For a

copy of this free leaflet, write: Anthropology Outreach and Public Information Office, Department of Anthropology, National Museum of Natural History, Smithsonian Institution, Washington, D.C. 20560.

SMITHSONIAN PROGRAMS

A National Seminar for Teachers titled "Teaching Writing Using Museum and Other Community Resources" will be offered July 9-18 by the Smithsonian Institution for elementary and secondary teachers living more than 75 miles outside Washington, D.C. The fee for materials is \$55. The course carries optional graduate credit from the University of Virginia, with tuition costing approximately \$500. In addition to learning about ways to use local museum exhibits and such diverse resources as cemeteries and houses as tools for teaching writing, participants will interview several Smithsonian staff writers to learn various approaches to writing. Applications must be postmarked by March 30. For more information and an application form, write: National Seminars, Office of Elementary and Secondary Education, Arts & Industries Bldg., Room 1163, Smithsonian Institution, Washington, DC 20560; or call (202) 357-3049 or (202) 357-1696 (TDD).

The Office of Elementary and Secondary Education (OESE) also offers ten week-long seminars for teachers, K-12, from Maryland, District of Columbia, and Virginia teachers who want in-service credit. Practical teaching ideas are given in a variety of arts and humanity subjects ranging from the influence of African art on contemporary art to developing quincentenary projects. For information, call Clare Cuddy at (202) 357-2404 for a registration form after May 1.

On April 12, OESE is sponsoring a program titled "Word of Mouth: Learning and Teaching Through Stories" that will consist of a workshop, presentations, and an evening of storytelling. Advance registration is April 8. For more information, call (202) 357-2404 or 357-3049.

Smithsonian Research Expeditions offers an opportunity to work for two weeks alongside a Smithsonian researcher or curator as a member of a research team. An

anthropology-related project, scheduled for July 16-28, offers participants an opportunity to record Hosay, a major Shi'ite festival, by conducting interviews and background research in Kingston. The data collected will be used by the Jamaican Institute for Folk Culture. For further information, write or call Smithsonian Research Expeditions, 490 L'Enfant Plaza, S.W., Suite 4210, Washington, DC 22024; (202) 357-1350.

OTHER ORGANIZATIONS TO CONTACT

There are several organizations that offer volunteer public participation in worldwide research expeditions in various scientific disciplines. Many of these organizations, listed below, are non-profit and participation fees may be treated as tax-deductible contributions.

University Research Expeditions Program
University of California, Desk K-15,
Berkeley, CA 94720
(415) 642-6586.

Earthwatch
680 Mount Auburn St., Box 403,
Watertown, MA 02172.
(617) 926-8200
(Earthwatch has a special scholarship program for teachers.)

International Research Expeditions
140 University Dr.
Menlo Park, CA 94024
(415) 323-4228

Foundation for Field Research
787 South Grade Rd.
Alpine, CA 92001-0020
(619) 445-9264

CEDAM International
(CEDAM stands for Conservation, Education, Diving, Archeology, Museums)
Fox Road
Croton-on-Hudson, NY 10520
(914) 271-5365

SELECTED FIELD SCHOOLS

Below is a selected list of organizations that offer fieldwork experience in the United States and abroad:

Summer Field School in St. Eustatius, Dutch West Indies, is sponsored by The College of William and Mary, June 12-July 23. The main focus will be the excavation of 18th and 19th century Dutch domestic urban sites. Application deadline is April 1. Write Carolyn B. Carson, Director, International Programs, Reves Center for International Studies, College of William and Mary, Williamsburg, VA 23185, or call (804) 221-3590; FAX (804) 221-3597.

Parsons School of Design offers students and teachers the course: Paleolithic Art and Archaeology of the Périgord (Dordogne), July 27-August 12. For more information, write or call: Parsons School of Design, Office of Special Programs, 66 Fifth Avenue, New York, NY 10011; (212) 741-8975. Early application is advised.

Prehistoric Caves of France is a two-week bicycling/camping study tour of the Les Eyzies region, from June 4-18. Participants bring their own bikes (flown at no extra charge) and camping gear. For more information contact: Dr. Whitney Azoy, Lawrenceville School, Lawrenceville, NJ 08648; (609) 895-1334 (evenings).

Crow Canyon Archaeological Center is a non-profit institution specializing in Southwestern archeological research and



education. The following programs introduce participants to archeological field methods, laboratory techniques, and excavation. The Adult Research Seminars, consisting of week-long sessions, are conducted from June through October. Transferable college credit is available. The High School Field School, also offering transferable credit, takes place from July 1 to 28; applications should be mailed in asap. The Teachers' Workshop, conducted from August 3-10, offers three-hours of graduate credit. Write or call: Crow Canyon Archaeological Center, 23390 County Road K, Cortez, CO 81321; (800) 422-8975, (303) 565-8975.

Center for American Archeology, Kampsville Archeological Center conducts educational research programs for junior and senior high school students, college students and the non-professional, and separate workshops for teachers. Write: Admissions Office, Kampsville Archeological Center, Kampsville, IL 62053, or call (618) 653-4316.

High school juniors and seniors and college students are also eligible to enroll for Archeological Field School at Kampsville through the University of Chicago. A nine week program runs from June 16-August 17 and a five week program from June 16-July 20. No archeological experience is necessary. Write The University of Chicago, Summer Session Office, Archeological Field School, 5835 S. Kimbark Ave., Chicago, IL 60637, or call (312) 702-6033.

Northwestern University's Ethnographic Field School (June 24-August 17) offers students of all disciplines an opportunity to experience another culture. Students design their own independent research project to learn about the Navajo or Hispanic cultures in New Mexico and Arizona. Write or call: Professor Oswald Werner, Department of Anthropology, Northwestern University, Evanston, IL 60208; (708) 491-5402 or (708) 328-4012, evenings.

Historical Archaeology Field School at Historic St. Mary's City, Maryland will focus this season on excavating a 17th century chapel, June 5-August 11. Housing is provided at a minimal cost. Application deadline is April 26. Write Archaeology Program, Department of Research, HSMC,

P.O. Box 39, St. Mary's City, MD 20686, or call (301) 862-0974.

Grasshopper, a town on the Fort Apache Indian Reservation in east-central Arizona, is the site of the largest Mogollon pueblo community 600 years ago. For information on the six-week field session, write J. Jefferson Reid, Director, Archaeological Field School, Department of Anthropology, The University of Arizona, Tucson, AZ 85721.

La Cienega del Pasado, a Spanish Colonial habitation site dated from ca. 1620 - 1680 located near Santa Fe, New Mexico, is the focus of the Field School of The Colorado College (June 3-July 12). Write: Dr. Marianne L. Stoller, Chair, Department of Anthropology, The Colorado College, 14 East Cache La Poudre St., Colorado Springs, CO 80903, or call (719) 389-6362.

Prehistoric Archaeology at Heshot ula Pueblo, an ancestral Zuni village, is sponsored by Arizona State University, June 3-July 5. Write: Keith W. Kintigh, Director, Archaeological Field School, Department of Anthropology, Arizona State University, Tempe, AZ 85287-2402.

The Origins of Caddoan Chiefdoms is an Earthwatch project in eastern Oklahoma, directed by Dan Rogers (Department of Anthropology, Smithsonian Institution) and Lois Albert (Oklahoma Archeological Survey). Excavations of these early moundbuilders (dated ca. A.D. 600-800) will take place May 19-31; June 2-14 and June 16-28. To apply for one of these sessions, write: Earthwatch, Box 403PI, Watertown, MA 02272, or call (617) 926-8200.

Human Origins and Prehistory in Kenya: The Koobi Fora Field School, offered by Harvard University Summer School and the National Museums of Kenya, introduces the wealth of paleoanthropological evidence at Koobi Fora and field methods in early man research. The field school consists of two six-week training sessions (June 6-July 17 and July 24-September 3). Write or call: Dr. Harry V. Merrick, Koobi Fora Field School, Harvard Summer School, 20 Garden St., Cambridge, MA 02138; (203) 481-0674, or (617) 495-2921 (Harvard University Summer School office).

Ann Kaupp

("Ape Conservation" continued from p.4)

intensively by both commercial (tea and coffee) and subsistence (manioc, bananas, potatoes) farmers. The human population density here approaches 300 people per square mile. Protein- and cash-poor farmers and BaTwa pygmies in close reciprocal relationships with farmers continue to set wire snares for small game inside the forest reserve, snares that occasionally maim or kill gorillas. For the landless pygmies, whose traditional life is tied to the forest, life outside the declining forest areas holds few possibilities. In Rwanda, the number of snares discovered by the anti-poaching patrols did decline from 2500 in 1988 to 1500-1600 in 1989.

Since gorillas (unlike the tourists) can travel freely across the Zaire-Rwanda border, anti-poaching efforts need to be coordinated internationally, but are hampered by political instability and armed insurrection in both countries. In the summer of 1990, an armed Tutsi force invaded Rwanda from Uganda across the eastern part of the Virunga range. As of February 1991, all conservation and tourist activities in the Parc des Volcans had been abandoned and the research facilities at Karisoke (established by the late Dian Fossey) burned to the ground. The effect on the small gorilla population confined in the Virungas could be devastating.

Tourism and Gorilla Health: A Vet's Dilemma

Is tourism succeeding as a conservation strategy? Are mountain gorilla numbers at least stable, if not increasing, and does the commitment of the governments and wildlife organizations involved appear solid? In early September 1990, we shared a flight from Nairobi to Frankfurt with Liz MacFie, a veterinarian with the Virunga Veterinary Center in Ruhengeri, and Jeff Seed, of the Karisoke Research Center. MacFie's organization, funded by the Morris Animal Foundation, is responsible for the surveillance and care of mountain gorilla health, while Seed oversees the anti-poaching patrols. From them we learned a great deal.

The November 1989 gorilla census indicated a total population of at least 310 animals in about 30 groups, up about 20% from 1981. But with such a small total population, extinction is possible at any moment. Gorillas, like chimps, are close enough to humans to catch their diseases. The small size of the reserves, the large numbers of humans on their peripheries, and the close daily contact of gorillas with tourists, guards, and others makes it almost impossible to isolate the gorilla population from human disease organisms. Even though regulations stipulate that humans must keep at least a one-meter distance between themselves and the gorillas in



Zaire, more in Rwanda, gorillas can and do initiate direct physical contact across these distances. A severe epidemic or an infection centered in one of the larger groups could easily disrupt the population and tip the balance towards rapid extinction.

What can or should a vet do about a sick or injured gorilla living in the "wild" in its natural habitat? After all, should not natural selection be allowed to weed out less fit or weaker individuals? If humans intervene, will they not be condemning future generations descended from weak or sickly individuals to constant veterinary intervention? Should MacFie attempt to save the life of a subordinate male injured by another male? Last year a respiratory epidemic struck one group of 34 animals, representing 11% of the entire population of mountain gorillas. The dominant silverback male died in April. At this point, a decision was made to treat the seriously ill animals with long-acting and broad-spectrum antibiotics. The gorilla veterinarian faces a constant dilemma: too much intervention will create a weakened, medically dependent population, while lack of intervention will almost surely lead to rapid extinction.

Chimpanzees: Tourism and Conservation

Could the gorilla model of forest tourism be used to set aside and patrol forest reserves for the common chimpanzee, and to mobilize local governments to support conservation measures more effectively? This possibility is currently being explored by several countries including Tanzania, Burundi and Zaire. Gombe National Park in Tanzania, the locus of most of Jane Goodall's studies has been inundated by the most intrepid tourists who find their own way there, on foot or by water taxi, camp on the beach, and attempt to make their own arrangements with the underpaid park staff. This situation compromises the research program at Gombe and also endangers the chimpanzees, who are even more susceptible than gorillas to human diseases. In 1966, a polio epidemic that began among the human population in Kigoma district killed about 10-15% of the Gombe chimpanzee population in one year, and in 1988, an additional 14 animals died from an introduced respiratory infection. Bacteria,

parasites, and other infectious organisms can be transmitted both by tourists and by resident staff.

In Burundi, Jane Goodall has been working to help set up a tourism program in a small vestige of forest that has been turned into a sanctuary for chimpanzees confiscated from poachers and dealers. Given the demand for chimpanzees as medical research subjects, the threat of illegal recapture is constant. One group of 30 vagabond animals is followed around full-time by ten armed guards. Goodall and others involved in this conservation effort hope that the greater visibility of the chimpanzees and daily contact with tourists when the program is well-established will help deter poachers.

One of the greatest problems with marketing chimpanzee tourism is delivering the chimpanzee experience on a predictable daily schedule. Chimpanzees are much more mobile than gorillas, and unlike gorillas, live in fluid social groupings whose membership is changing constantly. Not only do individuals move up to 25 km. per day, but they often travel above ground level, leaving little or no trail for an earthbound tourist to follow. The chimpanzee tourism project set up by Conrad Aveling and Annette Lanjoua in Zaire illustrates how chimpanzee tourism differs from gorilla tourism.

Chimpanzee poaching was relatively common in eastern Zaire when our archaeological research there began. In 1987, Conrad Aveling, who had just set up the gorilla tourism site at Djombe, heard about a group of chimpanzees in Tongo, a small salient area of the Par National des Virungas, that were threatened with total destruction of their habitat from charcoal cutting. In a country where almost everyone cooks their food with wood or charcoal, and where the basic staples (manioc, and plantains) are inedible unless they are cooked for a considerable time, the pressure on the remaining forest areas is enormous, even if people are not allowed to farm there. Aveling and Lanjoua had to provide alternate firewood/charcoal sources before the Tongo chimpanzees could be protected and developed as tourism subjects. The

funding agencies involved, World Wildlife Fund and the Frankfurt Zoological Society, were persuaded to support two reforestation projects outside the park area at Tongo. In addition to a continuing source of firewood, these projects also yielded both fruit for immediate human consumption and exotic wood species for commercial sale.

As a result, the local people appear very supportive of the chimpanzee project at Tongo, which began to accept tourist groups at the end of 1989. Twenty-six villagers are directly employed as guides and project staff, others as construction workers and staff for a new hotel recently developed there by a local Zairois contractor. When tourists arrive, they are asked if they have come to see "our chimps". Few other wildlife conservation projects in Africa are "owned" by the local community to this degree.

Initially, one trail was cut into the forest to aid in tracking the chimps; this was soon followed by a cross-cutting network of trails at 200-meter intervals, which provide human trackers rapid access to all parts of the chimpanzees' range. Trackers fan out in the early morning before the tourists arrive, following the chimpanzees by their calls. When a group is located, the trackers radio the tourist guide, who brings the tourists directly to the chimps' location. Occasionally tourists fail to see chimpanzees, but during the first eight months of tourism (Jan.-Aug. 1990), 98% of all tourist visits had resulted in at least a sighting of chimpanzees. This phenomenal success rate is due not only to the hard work of the trackers and guides but also to the unusual ecological situation of the Tongo site. The chimps occupy an ecological "island" of mature forest surrounded by the open desolation of recent lava flows. The forest island is dense with mature fruit-bearing trees, especially the chimps' favorite figs. The resulting population density of chimps, about 4 per km², is among the highest known.

Because the chimps can retreat into the treetops, visitors must often be content with glimpses of black shapes in the green canopy. This is particularly true on rainy days, when the chimps spend most of their time aloft. Since encounters cannot be

guaranteed, the fee has been set much lower than for gorillas, at \$40 per visit, and the number in the daily group is limited to four. It is unclear whether chimps can generate enough foreign currency to win the kind of government support provided to gorilla conservation.

Clearly, unlike mountain gorilla tourism, chimpanzee tourism can never provide an umbrella of protection over the total chimpanzee population. It is a quandary which awaits another solution.

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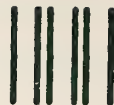
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Anthro Notes

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REFUGEE CHILDREN IN SCHOOL: UNDERSTANDING CULTURAL DIVERSITY IN THE CLASSROOM

INTRODUCTION

For an adult refugee, successful adaptation to the US sociocultural system is usually measured in economic terms, such as obtaining and holding a job. An equally objective measurement for refugee children is how well they are adapting to their school environment, measured in terms of grades achieved, and ability to pass through the school system to receive a high school diploma.

The last fifteen years has witnessed a massive influx of refugees coming to the United States, particularly from Asia and Latin America. In the 1960's, the United States admitted 200,000 to 300,000 immigrants a year. Last year the ceiling was raised to 700,000, a number that does not include illegal immigrants who are entering at an estimated rate of 200,000 a year. (Roberta Weiner, "New Faces At

School: How Demographics are Reshaping American Education," *Education Daily*, March 22, 1991, p.5). These newcomers are often fleeing situations that involve the traumas of war, ravaged economies, and religious and political persecution. For schools and teachers across this nation, refugee students challenge anew the educational system's ability to perform its traditional role: providing support, democratic opportunity, and educational advancement to a culturally diverse school population. The last decade's immigration explosion and the increased cultural diversity in the classroom are reflected in a new Census Bureau Report. That report shows the number of Hispanics nationwide rose 50 percent since 1980, from 14.6 million to 22.4 million in 1990; and the nation's Asian American population doubled, from about 3.5 million in 1980 to 7.3 million in 1990 (*Education Daily* March 13, 1991: p.1).

(continued on next page)



Anthropologists have much to offer teachers and other school professionals struggling to understand and work with refugee students from culturally diverse backgrounds. One of the most important contributions anthropology brings to the understanding of students' ethnic background is a compact package of facts, figures, concepts, and insights reflecting a wide variety of cultural variables. Anthropologists also can work with trained educational or social work personnel to develop an individual student's profile of factors influencing that student's experience in the school environment.

THE MULTIFACETED APPROACH

It is important to stress first that each individual refugee student comes with a complex cultural heritage. Many teachers are aware of the need to understand something about their students' cultural background but nevertheless are not trained to sort through the wide number of variables that can affect an individual refugee student's performance.

The following multifaceted set of factors was developed to help service providers within school settings (teachers, counselors, case workers) come to know their refugee students/clients better and to help guide the selection of intervention strategies for low achieving refugee students. It is often not until there is difficulty within the school environment that a given student will come to the attention of school personnel as needing assistance. Hence, if a student is "at risk" (i.e. may not complete high school due to excessive absences or inappropriate behavior in the school environment), a range of factors needs to be assessed before the teacher or other professional is in the best position to help the student. These factors are grouped into seven categories discussed below.

Cultural Background

Ethnic socio-cultural traditions; religious persuasion (not only at the level of the Great Traditions of Jewish, Christian, Buddhist, and Islamic beliefs, but also at the level of the more localized, popular beliefs found in oral traditions); patterns of interaction and linguistic communication; level of techno-economic environment.

Students' Gender

Expectations concerning the role of males and females in his or her homeland; which gender is considered more essential to the continuation of the family: i.e., matrilineal or patrilineal; economic involvement of each gender (marketing; farming; land, animal, property ownership) in the homeland. This is an area often overlooked by American service providers who unconsciously draw heavily on their own male-oriented society for standards and expectations of others.

Trauma

The level of trauma involved in the initial refugee experience is often difficult to ascertain; however, it can be critical to understanding the daily behavior of a student. Conditions under which the person and his/her family left the country of origin; amount of time spent in refugee camps, which family members made it out, which did not; did any parents or siblings die or become permanently disabled due to their escape; how old was the student when he/she left his/her country and how old was the student when he/she settled in the US?

Conditions in the U.S.

National and local ethos concerning accepting foreigners; cultural similarity or disparity within a refugee's ethnic community in the U.S.; economic opportunities; religious affiliation.

Family Environment

Socioeconomic background of the family; education level of the parents; age of parents when they left home country as well as how long they have resided in the US; current status of family (chronically ill parents, unemployment...)

Educational Background

What, if any, schooling did the student receive in his/her own language; expectation level the parents have for their children in American schools; expectations by parents and students of teacher's role in the education of a student, and of students' role in the classroom (passive, active).

Psychological Factors

Coping mechanisms, level of mental health, but individual variation is very important to consider; otherwise, we might take all of the above factors into account and still not be able to understand the individual student we are concerned with at the moment.

How does one find answers for all the above questions? For some information, personal interviews with the student and his/her parents and other family members may be the most useful avenue, but in other cases, anthropologists at a local college or university can help locate appropriate information and literature describing the cultural background of individual students. Files at the school or from the student's resettlement agency can be helpful. Finally, other social agencies or religious organizations involved in resettlement efforts can be consulted.

Armed with information about the multifaceted variables of culture, gender, post-traumatic stress disorders, new country conditions, family environment, educational background and psychological characteristics of an individual refugee student, the teacher or staff member can begin to understand the student. However, there is even one more condition essential to this mix: change. Nothing is written in stone, all variables may and will change. Resettlement is a dynamic situation for the young refugee, and teachers must be sensitive to the potential for change.

PREVENTING STEREOTYPING

The multi-faceted approach to working with refugee students is particularly important as a strategy to prevent stereotyping among school personnel. Stereotyping easily develops when only one or two variables are used to define an entire ethnic group.

For example, in the mass media, as well as in the educational literature, there has been an emphasis on the disproportionate amount of educational success by Asian refugees.

A disconcerting element in much of this research is the tendency to refer to Asians in the US as a homogenous group (Hsia, J., *Asian Americans in Higher Education and at Work*, 1988). Further, much of the Asian

population referred to consists largely of people of Japanese descent, and sometimes of Vietnamese descent. The Japanese obviously are not refugees, and may not even be first generation migrants. So, what we have is a discussion of a diverse Asian population as if they are all quite homogenous, or at most dichotomous; and perhaps, a confusion of those Asians who migrated to the US versus those Asians who came as refugees.

While both of these errors are understandable, they also impede our comprehension of the situation. It is a common and understandable human approach to lump similar ethnic groups under one heading: for example, Hispanic usually refers to those of Mexican, Cuban, Honduran, Peruvian, etc. descent; Black usually refers to those of African-American, African-Puerto Rican, Garifina (Black Carib), Zulu, Nigerian, etc. descent; White usually refers to those of English, Italian, Canadian, Euro-American, Spanish, Russian, etc. descent. The reason this situation impedes our comprehension is obvious. In most normal classroom situations we work hard to differentiate within groups as well as between groups. Regardless of good intentions, however, many teachers work from the perspective that multiethnic groups can be lumped into single understandable categories, such as Asians or ESL/foreign students.

Among those teachers and researchers who recognize the need to consider individual ethnic factors, we find a slightly refined version of the above tendency to "lump" people under a single ethnic category. That is, they look at one factor and over-simplify that factor's impact to explain what is happening to their young refugees. When considering the population from a cultural perspective, that one factor is often religious, for example, Buddhism. When considering the population from an educational perspective (as many ESL teachers and other language teachers might), the impact of literacy in their own language becomes a dominant theme. When considering the population from a socio-psychological perspective (as many social workers and medical case workers do), the trauma of the process of being torn from your family and homeland becomes the critical factor to consider.

Certainly, any one of the above approaches is essential to understanding the young refugee, but none of them in itself explains enough to allow a teacher or case worker to really help the individual.

ST. LOUIS PUBLIC SCHOOLS: A CASE STUDY

The St. Louis Public School System (SLPS) is a large urban school system with a sizable refugee student population. An English as a Second Language Program (ESL) was established in 1981 to serve 135 refugee students (83 Vietnamese and 52 Lao). By the late 1980's, the ESL Program served an average of 500 students per year, and included students from 34 countries, including 38% Vietnamese and 12% Laotian. From interviewing the ESL social worker and other SLPS staff, it became clear that various ethnic groups are viewed within the schools as having certain characteristics, and that these group characterizations obscure some of the complex reasons behind refugee performance.

For example, Afgani boys are often seen as surly and having a chip on their shoulder, yet they manage to achieve. The parents encourage these boys to make the best of their school situation. On the other hand, according to school personnel, the girls are not encouraged at all. The parents even come up with reasons to keep them home. The social worker summed up the parental attitude about girls and school: the parents are "so old-fashioned, they don't think girls need to go to school at all." Undoubtedly, when these girls turn 16, the parents will no longer send them. Thus, the male students stay in school and are not considered at risk of dropping out; however, the girls are often chronically absent and in danger of dropping out before completing high school.

Among the few Ethiopian children attending school, however, the picture is different. While the mother is considered second to her husband, and, as school personnel put it, "at the mercy of the father," this lower female status within the family is not translated into poor school performance for the girls who both attend class and do well in their school work. This difference between Afgani and Ethiopian girls highlights the need to consider individual variation involved in

resettlement's dynamic process. In the Ethiopian example, one mother very much wants her children to have more than she herself had, and she believes education will help her children achieve more.

The Vietnamese, the group so often heralded in the national mass media as the "successful" Asians, are the largest group represented in the St. Louis School System. As with any large group there are successes and failures. Apparently, school personnel do not see an obvious difference between male and female Vietnamese students who are doing well or at least all right in their studies. However, a larger number of male Vietnamese students are at risk of dropping out of high school without graduating than are female Vietnamese students. More males than females tend to fall out at the bottom, largely due to their aggressive behavior toward other American students who harass them.

Teachers feel that low-achieving girls are trying, that they are not a behavior problem. One explanation for their poor grades is that they are too "country." A large group of the underachieving boys, on the other hand, stand out in the school setting: they do not seem to be able to focus on their schoolwork; they show little respect for authority and school, and they are often in trouble at school. These boys elicit little sympathy or tolerance from their teachers.

Among the Khmer, who make up about 8% of the ESL population, the boys and girls seem to receive the same parental treatment concerning their schooling. That is, the parents believe that the teacher should take care of all aspects of their child's life concerned with schooling. The parents are not inclined to push their children to succeed. And, once the children start to fail, the parents feel that it is beyond their control to force their children to turn their school work around and become successful. Some of this attitude toward the inability of parents to mold their children is seen to come from their perception of Buddhist tenets such as: "Don't push the river, it floats on its own." By the time the child is over 17, the parents feel helpless in getting their children to attend school. The threat of juvenile court will scare the parents, but

(continued on p. 10)

MULTICULTURAL EDUCATION

[Editor's Note: The statement below is excerpted from a background paper on multicultural education issued by The Quality Education for Minorities (QEM) Network, and is one of a series of QEM analyses of current issues in education.

The Quality Education for Minorities (QEM) Network was established in July 1990, as a non-profit organization in Washington, D.C., dedicated to improving education for minorities throughout the nation. Although its efforts are focused on members of those groups historically under-served by our educational system (African Americans, Alaska Natives, American Indians, Mexican Americans and Puerto Ricans) the QEM Network advocates quality education for all students.]

Background

The United States has long been recognized as the most pluralistic and diverse of the industrialized nations in the world. That is one of the characteristics that makes us unique among nations. Our diversity places us in a strong position to provide leadership in an increasingly global society. Further, that diversity (ethnic, racial, religious and cultural) is projected to increase in the 21st century. For example approximately 29% of all school aged children enrolled today in our country's public schools are racial and ethnic minorities. It is projected that by the year 2030, this figure will rise to more than 35%.

Our children need to understand that while we are a multicultural people, we are a single nation--a nation bound together by decades of struggle to nurture a common set of values, mores and principles. However, adequate opportunities have not existed for all citizens to learn of the contributions that various groups have made and continue to make toward the building of our great nation. Our children need to understand and to value the strength of the pluralism and diversity which comprise our national heritage. In order to achieve this goal, our children need a multicultural education. In this article, the term multicultural education

is used to mean education that values cultural pluralism and advances equal opportunity within schools. Students need an education that will enable them to understand and appreciate the contributions made by all of America's people--an education that binds rather than rends the cultural, social and political fabric of America.

Currently, two schools of thought are dominant in the multicultural education debate about how the curriculum should be structured and to whom it should be taught. Those who advocate the centrist or separatist position (also called the particularist view) believe there should be separate courses emphasizing each of the primary ethnic/racial groups in America: African Americans, Asian Americans, Hispanic Americans and Native Americans. The second group advocates the pluralist or infusion approach that means that multicultural education should be integrated into every course at every grade level, thus all students would learn more about our pluralistic and diverse society.

Thus, neither Afrocentrism nor Eurocentrism would dominate the curriculum; rather, the emphasis would be on inclusion--a curriculum which reflects the contributions of all groups in America.

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MAJOR ISSUES/PERSPECTIVES

1. Multicultural education curriculum materials and programs should be characterized by the highest degree of integrity and quality.

2. Multicultural education curriculum materials and programs should be predicated upon clearly articulated goals that promote:

- * the strengthening and valuing of cultural diversity
- * human rights and respect for diversity
- * alternative life choices for people (e.g., respecting the rights of individuals and groups to adhere to their religious or cultural heritage within the larger society)
- * social justice and equal opportunity for all people
- * the empowerment of members of all ethnic, racial and religious groups.

3. Certification requirements for all practicing teachers and teacher candidates should include training in multicultural education. Teacher workforce projections suggest that fewer than 5% of all teachers will come from ethnic minority groups while more than 35% of all students will be from racial minority families. It is imperative, therefore, that all teachers be prepared to teach in a multicultural classroom environment.

4. Publishing companies need to work with educators, experts in multicultural education and other community leaders to revise textbooks and other instructional materials to more accurately reflect the pluralism and diversity in our society. Textbooks should reflect the contributions and heritage of the diverse races, ethnic groups, classes and religions which comprise America.

For further information or comment, please contact Mary Futrell, Senior Consultant at the QEM Network (1818 N St., N.W., Suite 350, Washington, DC 20036; (202) 659-1818).

THE NEVILLE MUSEUM CELEBRATES DIVERSITY

How can a museum help teachers develop a multi-cultural perspective?

Earlier this year in Green Bay, Wisconsin, the Neville Public Museum organized a one-day teachers' conference, "Cultural Collage ...Valuing Diversity," with the support of St. Norbert College; the University of Wisconsin--Green Bay; and Edimpro, Department of the Green Bay Public Schools. Instead of presenting distant cultures and peoples, the museum's education director, Jeanne Schuldes, focused the teacher program on learning about and appreciating the different ethnic groups in the community.

In the Opening Session, "What is Culture and How is it Transmitted?," Lanouette presented the anthropological answers to those questions and offered criteria for evaluating textbooks that present different cultures. A panel followed representing the cultural and social diversity of Northeast Wisconsin, including the experience of being homeless, Hispanic, Menominee, and African-American in the Green Bay community.

A dance and poetry performance presented the issues and emotions of growing up as an African-American in the community and how African-Americans create pride in their ethnic identity. The afternoon session ended with the NEWACE (Northeast Wisconsin Alliance for Continuing Education) Social Action Theatre. Through short performances, the players re-enacted "stories" of cultural diversity based on actual experiences. The scenarios that day involved name calling and ethnic jokes; prejudice toward the Hmong, the most recent immigrants from Laos, by a Vietnam vet; the experience of the Oneida, whose reservation is just outside Green Bay; and stereotypes about African-Americans expressed in a supermarket. Each scenario was followed by a dialogue between the actors and the audience. In the evening the Ko-Thi Dance Company demonstrated traditional and contemporary African-American dances and songs.

JoAnne Lanouette

TEACHER'S CORNER: ANCIENT AFRICA AND THE PORTLAND CURRICULUM RESOURCE

School systems in Washington, D.C., Atlanta, Indianapolis, and Baltimore among others are examining or adopting forms of African-centered (AC) curricula. AC proponents argue that social studies textbooks and curricula are warped by "Eurocentric" values, distortions, and exclusions, and that major revisions are needed. An example of an AC curriculum resource is the Portland, Oregon African-American Baseline Essays, revised 1990, consisting of six long survey essays on "Social Studies" [SS], "Language Arts" [LA], "Mathematics" [MA], "Science and Technology" [ST], "Music" [MU] and "Art" [AR]. Some of these essays (e.g. music and mathematics) make a strong case for previously ignored African contributions to world knowledge and culture based for the most part on sound scholarship. However, other essays contain inaccuracies which lessen the impact of their arguments and should be corrected because of the importance of these essays in developing school curricula.

Teachers who wish to design new curricula or to incorporate more material on Africa into existing curricula are faced with a dilemma. How should this new Afro-centric view of history be evaluated?

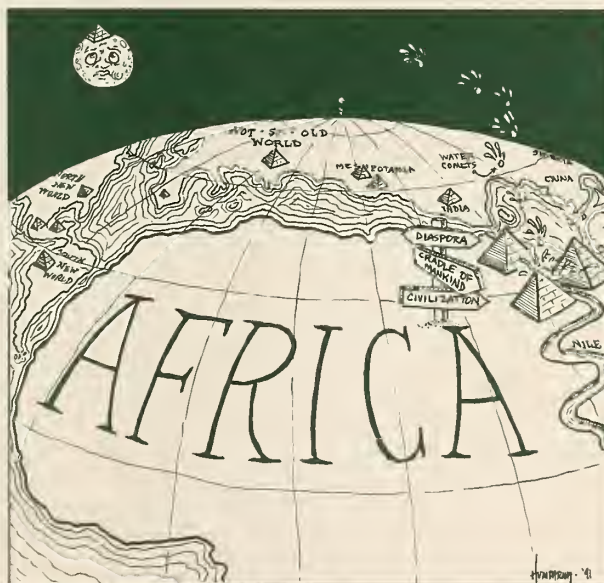
This article addresses limited issues of historical and archaeological interpretation presented in the African American Baseline Essays. It is based on detailed critiques of the ancient Egypt portions of each essay by Egyptologist Frank Yurco of Chicago's Field Museum of Natural History together with a current perspective on African prehistory provided by Alison Brooks, Professor of Anthropology (African archaeology) at George Washington University. Excavations and historical scholarship including works by African and Afro-American scholars are referenced here and in the longer critiques (e.g. Keita, Kanimba).

"Egypt-centric"

About forty percent of the material in the six essays focusses on the contributions of ancient Egypt. Another 1/4 to 1/3 deals with contributions of African-Americans in the

New World, while most of the remaining portions are concerned with prehistoric Africa. A few pages are devoted to the rich archaeological and protohistoric record of African states and kingdoms south of the Sahara. The tremendous emphasis on ancient Egypt is in response to two accurately-perceived biases in current curricula: 1) courses in the history of western civilization often begin with the Greeks and ignore non-European antecedents and 2) if non-European antecedents are discussed, Egypt is often treated as if it were part of the Near East and not part of Africa. Differences between early Egyptian and Mesopotamian states, and the evidence for some degree of separate development, are ignored.

Briefly stated, the AC historical view holds that: (1) "Ancient Egypt was a Black nation" (Portland, Intro:A-6), or "The Land of the Blacks" (MU:2); (2) "the original home of the [ancient Egyptian] prehistoric ancestors was south in ... the neighborhood of Uganda and Punt [Ethiopia/Somalia] (SS:22); (3) West Africa, where most African-Americans trace their ancestry, was peopled from the Nile Valley (Diop 1974), as "invasions and conquests by Asians, Europeans, and Arabs...pushed Blacks further south" (AR:7); (4) Egypt was "the first great civilization" (SS:21), since it was only "During the Fifth and Sixth Dynasties" of ancient Egypt (i.e. after 2563 BCE) that "The nations and people in the other river valley, the Tigris



and Euphrates, were laying the foundation of Sumerian civilization" (SS:30); (5) the culture and achievements of ancient Greece and Western Civilization were largely derived from ancient Egypt (Bernal 1987); and (6) Olmec Civilization in Meso-America (Van Sertima 1976) and most other Old World civilizations were largely the products of an ancient African diaspora. This latter view is the most discredited aspect of the curriculum and has been largely (but not entirely) dropped from the current revised version.

All of the above assertions are problematic. "Black," like "White," may be hard to define. While there is mounting evidence that Egypt's origins were fundamentally African (see *Anthro. Notes* vol. 11, no. 1, 1989), studies in both physical anthropology and ancient Egyptian art suggest that the ancient Egyptians like the modern Egyptians varied in skin color and skeletal features from North to South. The early predynastic population of Southern Egypt clearly has affinities with tropical Africans (see reviews and data in Keita 1990). There is no evidence that Egypt was a forerunner or a major factor in the formation of Mesopotamian civilization, since the beginnings of the two are approximately contemporaneous. While Egyptian influence on the ancient Aegean precursors of Greek civilization is undeniable, Mesopotamian civilization also contributed to the development of Greek civilization in major ways. Finally, evidence for a large-scale Egyptian diaspora to the south in the face of Asian invaders is lacking, and is refuted by most African scholars in this field. Most "invasions," as correctly noted in the "Math" essay (MA:29), involved small numbers of people, often soldiers only, and did not displace the vast majority of local peoples (Kanimba, 1986).

Problems in the Baseline Essays

Inaccuracies in the Baseline Essays include both facts and interpretations. Characteristics with world-wide distribution (pentatonic scale, use of prophecy, body language, creation stories, rock art) are often treated as if they diffused from an African center, while other traits that might be considered Africa-specific such as trickster stories are not highlighted. Some essays do highlight major African

contributions to world-wide culture; the mention of call-and-response in the music section is one example, and the Egyptian origin of Euclidean geometry (MA) is another.

The richness of cultural diversity within Africa is generally ignored in these essays. In the LA essay, the "unity" of African languages (which number more than 800 mutually unintelligible languages) is established by referring only to the "Bantu" language "family" (actually a subgroup of one of the 5-6 African language families), and by an incorrect assertion that most of the ancestral languages of the slaves were tonal.

Dates and dynasties are confused. In the Social Studies essay, almost all the dates associated with human evolutionary stages are incorrect according to current evidence. In addition, dates and periods overlap and contradict each other and are not consistent among the six essays. Contrary to assertions in several essays (AR:14-16, MU:3-6) the earliest pottery (Japan, 12,000 yrs), sculpture (Germany 34,000 yrs) and musical instruments (Hungary 31,000 yrs) are not found in Africa, at least not according to current knowledge. On the other hand, early southern African rock art and the Ishango "calendar" bone, used variously in the essays to represent the beginnings of literature, art and mathematics have actually been redated to a much older period, between 20,000 and 30,000 years ago, about the same time as similar manifestations in Europe, Siberia and Australia which are not mentioned in the essays (except in the Social Studies essay).

Afrocentric "Science" Essay

The "Science and Technology" essay endorses such concepts as the "extra-terrestrial origin of the Nile theory," whereby "water-laden micro-comets...were the source of the ocean's waters" and "of rivers' water like the Nile." (ST:15) Mystical powers are attributed to the pyramids, and the author misinterprets artifacts such as bird effigies to prove that the ancient Egyptians experimented with aeronautics, antennas and electricity. This essay also states that "for the ancient Egyptians as well as contemporary Africans world-wide, there is no distinction and thus no separation between science and religion"

(ST:14). While the pursuit of scientific knowledge in the west and the earlier flourishing of Islamic science have certainly been deeply affected by religion and cultural values, most scientists including African scientists would accept that science seeks to describe the workings of the material world, and that scientific propositions must be testable (potentially falsifiable) through observations of natural phenomena. The science essay's perspective is reflected in its list of "the first set of scientific paradigms: the basis from which the ancient Egyptians did all types of scientific investigations" (ST:12). These paradigms include "acknowledgement of a supreme consciousness," "divine self-organization," "consciousness survives dissolution of the body," "transmaterial cause and effect," *etc.* None of these propositions are testable. This essay's approach to science is inconsistent with accepted scientific methodology as it is practiced world-wide.

Evaluating Afrocentric and Multicultural Histories

How do we establish historical affinities or ancient contacts using archaeological data or oral histories? When does a contact reflect human migration on a large scale, versus the voyages of a single traveller or even indirect trade at a distance without direct contact? Archaeologists suggest that when we attempt to suggest direct links between two ancient societies, the traits used to establish the tie must consist of related complexes of traits, and must reflect similar complexes of behavior in the two societies being compared. Isolated traits such as pyramids, circumcision, and stringed instruments are too generalized to be used for this purpose, since such traits could easily have developed separately (Feder 1990:64-5). On the other hand, the presence, in two societies, of pyramids associated with an elaborate funerary ritual involving mummification and belief in a material afterlife constitutes fairly strong evidence of direct continuity. When we trace people by their biology, we must recognize the variability inherent in all human populations, and that single biological traits do not establish historical ties. For example, the ancient ice-age "migrations out of Africa" do not "account...for the appearance of African physical-type people in widely-

scattered areas outside of Africa" (SS:18). According to genetic evidence, Europeans and east Asians are at least as closely related to these ancient African migrants as are Australian Aborigines or other non-African dark-skinned peoples. In each case local environmental adaptation (microevolution) has caused some ancestral features to be retained and others lost. For example, Australian Aborigines differ biologically from tropical Africans in many traits other than skin color.

The authors of the Portland essays and their consultants are, for the most part, not scholars of ancient Egyptian or African history, and many of the references they cite are outdated secondary sources. Other writings often cited by these authors derive from an earlier group (ca. 1900-1925) of mostly British anthropologists and historical theorists, the extreme diffusionists or "Heliocentric" school. These theorists asserted on the basis of widely distributed single traits that Egypt was the center of all basic human invention. Citations of their work (especially Breasted) in the Baseline Essays do not reference the numerous criticisms which caused the Heliocentric School to be discredited. Recent Egyptological and archaeological scholarship is not generally reflected in the essays, even when it would support the assertions of the authors.

How can teachers and curriculum writers judge the accuracy of materials presented for inclusion in curricula? First, we should develop contacts with recognized scholars and university and museum departments in their regions. Second, we should stay informed of developments in our fields through professional journals and conferences.

Teachers, parents, and students are justified in wanting multicultural curricula that reflect the achievements of the world's diverse cultures, including those of Africa. Older curricula do reflect a bias that often denied or neglected the achievements and contributions of Africa. We must be careful, however, that new curricula are based on genuine scholarship. Indeed, when viewed from the perspectives of current archaeological, anthropological and linguistic research, the ancient cultures of Mesopotamia, the Levant, Greece and ancient Africa

including Egypt exhibit a long and rich experience of multicultural development. Efforts should be made to bring together scholars and experts in these fields along with educators to develop multicultural curricula based on sound scholarship.

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[Teachers wishing copies of Egyptologist Frank Yurco's and other critiques of each of the six Portland essays or the packet "Ancient Egyptians: Were They Black?" can write to:

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* * * *

("Refugee Children" continued from p. 4)

take control of their children, and their certainty that such control is beyond their capabilities.

The Lao, another Buddhist oriented cultural group, react to the school situation somewhat differently. The girls seem to work despite difficult odds. Within the context of school, the Lao female students do better and are more consistent as students, compared to their male counterparts, who tend to be chronically tardy and somewhat aggressive. These girls can be considered successes, in that they are not considered to be at risk of dropping out before graduating from high school. On the other hand, even among the educated Lao, many of the sons exhibit problematic behavior: cutting classes, skipping school, losing their tempers and getting into fights (particularly over anything that strikes them as being an affront to their manhood.)

When looking at this particular population of ESL students, most of whom are refugees, we find that there is a definite pattern of difference by gender. However, as we have seen, this pattern is not consistent for all females or all males across ethnic lines. Nor can we say that those influenced by the same Great Tradition religion such as Buddhism will react to schooling in the same way. Individual variation is apparent within every ethnic group.

Overall, the reactions of St. Louis classroom teachers to the ESL students are two-pronged. On the one hand, the teachers often praise their Asian students (most of whom are ESL) and express pleasure at having such well-motivated, well-behaved, high achievers in their classrooms. On the other hand, there is little sympathy for the underachieving, problematic misfits. In the latter case, the ESL students are perceived as a group (i.e. foreigners) and are not broken down by ethnicity. The sense among some teachers is that these foreigners should be doing better, that they are now in America, and that it is up to them to embrace this educational opportunity. In either reaction--to high or low achievers--there is little or no recognition of cultural variation, much less the impact of the dual forces of culture and gender. It is often gender that is overlooked as a significant

variation, much less the impact of the dual forces of culture and gender. It is often gender that is overlooked as a significant variable, which school personnel must assess, if they are to help their individual students.

CONCLUSION

The complexity surrounding refugee students demands that teachers and school personnel search out new ways of understanding the many factors influencing the school experience of refugee students. Many teachers are well aware of the need to understand their students' cultural backgrounds. Unfortunately, sometimes gleaned a little cultural information can lead to increased stereotypic thinking. For example, teachers who believe that all Vietnamese feel education is important, often also believe that Vietnamese students will do well even with minimal teacher/school assistance. On the other hand, those teachers who believe that because Lao or Khmer students are Buddhist, their parents will not encourage or push them to work hard in school or try to overcome initial poor performance. This assessment can lead to teachers feeling it is futile to encourage these students. However, since Vietnamese students are also Buddhist, these two stereotypes prove to be contradictory as well as unhelpful in understanding individual students. Such stereotyping can easily cloud the issue of a student's success in the school environment. The multifaceted approach described in this article is one possible tool that can prevent stereotyping individual students.

As more and more of our schools become culturally diverse, anthropologists can do much to assist teachers in utilizing a multifaceted, anthropological approach to understanding the cultural backgrounds of their individual students. Teachers should be encouraged to study anthropology during their years of pre-service training, and school systems should be encouraged to employ anthropologists for the in-service training of teachers. Cultural Diversity is not a "fad" that will disappear in the future and an anthropological perspective on culture is an indispensable tool for teachers working with culturally diverse classrooms.

America's shifting demographic profile, brought about by immigration and

differential birth rates, is inexorably changing the face of American schools and colleges, altering their mission, their student bodies, and their curriculum. "If birth and immigration rates hold, by the year 2000, the nation's school-age populace will be one third minority: black children, who now comprise 15% of the school-age population, will constitute 17%, and Hispanic children, now 10%, will climb to 13%" (Weiner, p. 7).

As our country's classrooms become increasingly diverse, the anthropological perspective becomes ever more helpful, not only in working with refugee students, but with all individual students from culturally diverse backgrounds.

[This article, edited by Ruth Selig, is based on a longer, heavily documented paper presented at the American Anthropological Association's 1990 Annual Meeting in New Orleans. The original paper can be obtained by writing the author at 11829 Claychester Drive, Des Peres, MO 63131.]

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Critical Thoughts on Mount Vernon's "Authentic" Past

[Editor's Note: This article focuses on Mount Vernon, but the issues it raises about historical houses, living history sites, and museums applies to many similar sites throughout the country. Encouraging students to visit these sites with a more critical perspective such as the one presented in this article may help them develop not only critical thinking skills but a more thoughtful approach to the study of history and the various ways each generation re-interprets its past.]

History museums are one of many ways that people learn about the past, yet the pasts presented by these and other museums are creations. Tourists to Mount Vernon know that they are not seeing the "real" past, a landscape frozen in time. Regardless, many leave the site believing what they have seen is an objective rendering of the past. Museums are convincing because they serve up "authentic" landscapes that appear accurate and true. The authenticity of the museum's landscape, in turn, gives its particular reading of history greater authority.

What may be less apparent is that the pasts seen are partial and changing. There is no one complete, objective history. Historic sites and history museums stress certain themes or facts over others. Interpretive programs impart specific knowledge during a visit. These interpretive strategies also change over time, as a result of changing conventions in museum practice or as a response to changing social discourse about culture.

In any given year, approximately one million visitors come to Mount Vernon, George Washington's plantation home. For some an act of pilgrimage, for others part of the checklist of must-see sites in Washington, D.C. Visitors come to see the mansion, tour the grounds, and pay their respects at Washington's tomb. The present Mount Vernon estate is situated on 500 acres, only a small part of the approximately 8,000 acres that the Washingtons once held. Following Washington's death in 1799, the estate was

kept in the Washington family until 1858. At this time the estate was purchased for \$200,000 by a private organization, the Mount Vernon Ladies' Association (hereafter MVLA) (Marling 1988, Wallace 1986). Their purchase of the plantation marks the approximate beginning of the historic preservation movement in the United States (Marling 1988).

The goal of the Association was and is to restore the plantation to its appearance in 1799--to create an authentic, timeless landscape. This idea was explicitly stated as early as 1874 at which time the first Regent of the organization said that, "The mansion and the grounds around it should be religiously guarded from change--should be kept as Washington left them. Upon you rests this duty" (MVLA Annual Report 1988, p. 89).

The Regent's charge embraces a serious problem since the landscape that the MVLA purchased was not the same one that Washington left over a half century earlier. Fire and general decay had already compromised a number of buildings. At the time of its purchase, the mansion was basically empty and parts were at risk of falling down. The Association stabilized the structure and began a process of refurnishing the house with either Washington family objects or appropriate period pieces.

(continued on p. 13)



Consequences and Contradictions of Authenticity

In meeting the first Regent's mandate, authenticity, understood as accuracy and truth, undergirds the museum's interpretation of the plantation and is the source of its authority. The term appears over and over in the literature of the Association and is frequently mentioned by interpreters on the house tour. The concept has guided the collections policy of the museum and has been the inspiration for the changes that have taken place both within the house and throughout the grounds.

Despite this, the contemporary landscape is in truth no more a picture of the Mount Vernon of 1799 than the decrepit landscape of the mid-1800's. Regardless of the placement and style of buildings and the historical research that went into filling them, Mount Vernon remains a contemporary cultural construct. The history of the cultural landscape at Mount Vernon can be read as the result of the Association's changing vision of what Mount Vernon was.

Authenticity is an important concept and we need to understand it. How is it determined? Who decides what is authentic? Were the Association to embrace a concept of authenticity that dictated the display of only artifacts and buildings that could be attributed to Washington, the effect on the landscape would be tremendous. The mansion would lose about 75% of the furniture. The surrounding outbuildings would be almost entirely empty of objects and modern facilities, and the museum would have to be taken down. Staff would also need to mess up the grounds and trim the trees. Of course, the million plus visitors would have to be excluded.

If absolute veracity is not Mount Vernon's concept of authenticity, what is? Superintendent Charles Wall suggests that "Restoration, like diplomacy, might be described as the art of the possible" (1974:4). Wall means that some aspects of the landscape should receive authentic restoration and some must be compromised, whether it be for lack of funds or information.

The constraints on interpretation, however, go beyond information and money. The

museum must take into consideration the number of visitors, the length of the average visit and its own sense of its mission. Although the restoration of the grounds is a readily acknowledged goal of the Association, special significance is and always has been given to the mansion. Wall points out that the mansion dependencies (outbuildings) are just that, dependencies.

The search for the authentic landscape encounters ideological contests as well. The MVLA has shown itself to be very protective of Washington and his image. It is not uncommon to see rumors about the General rebutted in the pages of the annual report (MVLA Annual Reports 1965, 1970). While it is easy for the museum to interpret Washington the hero, statesman, and farmer, it is more difficult to represent Washington the slave owner.

Landscapes and Ideology

All these factors force the MVLA to make choices about how the plantation should look. The interpreted landscape remains a representation of the past, an ideological and negotiated space that promotes a particular vision of Washington. The focus of active interpretation on the estate is the mansion house. The house tour provides the setting in which we learn about farming but not the farm, and the presidency, but only as it relates to events taking place within the mansion. The pre-eminence of the house points to the interpretation of the plantation as a domestic rather than as an economic space. This is an important distinction, since the farm served both as an administrative center for the plantation and also as the Washingtons' home. In its interpretation, the house has been abstracted from its economic context.

Domestic life is stressed, but only in a limited sense. It is the domestic life of the Washingtons' that is of paramount concern, that not of the slaves. And generally, it is the General's domestic life that is of interest. Certainly Martha, her children, and grandchildren are mentioned in the house tour and on some of the signs about the estate, but the focus is undeniably on George.

Along with the favor given the Washington family domestic environment, the

outbuildings are given a lesser status in the literature of the Association and within the landscape itself. Rooms within the mansion are separately described in the tourist's handbook while the outbuildings are described all together under the heading "Plantation Life" (Wall et al. 1985). While the house is interpreted by people, the dependencies are interpreted by signs that talk about the function of the building. The house is depicted and discussed as filled with individuals while the outbuildings were used by anonymous people. Outbuildings are filled with uninterpreted objects that serve as passive reflections of the activities undertaken within them. These buildings stand as mute reminders of the day-to-day tasks of the plantation rather than of the slaves and others who performed them (Ettema 1987, Gibb and Davis 1989, Pearce 1990).

Not surprisingly, the subject of slavery is a sensitive one to the Association. The MVLA erected a monument near the slave burial ground in the 1920's, another in the 1980's, and reconstructed the slave quarter in 1951. Current school guides confront and address the subject, and there is an interest amongst the staff to better interpret slavery. It did, however, take ten years to open and interpret the Greenhouse Quarter, the primary slave quarter, to the public, due more to the fear of controversy than lack of information (Dennis Pogue personal communication). It was not until the early 80's that the Association published a small pamphlet about slavery at Mount Vernon, and only in 1985 did the *Mount Vernon Handbook* use the word slave. The subject is still only slightly, if ever, mentioned in the house tours.

The MVLA's sensitivity to the subject is also visible on the landscape. On the grounds of the plantation, slavery is downplayed. In the Greenhouse Quarter only one quarter of the space is used to depict slave living conditions, with the rest used for storage, the location of a museum shop, and a museum extension. The Museum, which is actually housed in a reconstruction of an early slave quarter, is used entirely as a repository for Washington family relics. The Association's de-emphasis of slavery within the interpreted landscape may be entirely unconscious, but that makes it no less ideological.

Interpretation at Mount Vernon

I am not trying to suggest that Mount Vernon is out of the ordinary nor is it a particularly egregious portrayal of the past. In fact, interpretation at Mount Vernon is similar to that practiced at most history museums and is a model for many. Some may view this as Mount Vernon's appropriate role--to present objective facts, not value judgments. But as Chappell (1989:248) notes, this attitude is "conservatism, not objectivity." It is conservatism because it reflects a belief that objects and facts speak for themselves, without regard to what facts are not presented, and what others might be. Further, the portrayal denies alternative interpretations as biased while never reflecting on its own subjectivity.

The past presented at Mount Vernon is not invalid; rather it is a partial, subjective past. It offers only one reading of history. There are alternatives, for example, to the presentation of women at Mount Vernon that currently focuses on such things as where Martha Washington did her embroidery and where Nelly played the harpsichord for the General. These images of gender at Mount Vernon are not wrong. They are no doubt the result of research. How else might we look at gender?

One could imagine using the house tour or an exhibit to point out how the vision of the Washington family fits nicely with our contemporary gender stereotypes. Or perhaps the image of the family could provide the basis for pointing out the complexity of gender relations on the plantation. The family life of the Washington's and one of the slave families could be contrasted. Martha Washington's role on the plantation could be explored in more depth. She may have spent much of her time engaged in sewing and embroidery, but her dower slaves were the major source of labor for all of the Washington farms (Wall et al. 1985). She owned more slaves than her husband, yet this is never mentioned.

Conclusion

What Mount Vernon needs is to open a dialogue and engage its audience. At present, the mansion tour is passive and

informative, but decidedly not interactive. Rather than presenting authoritative and unquestioned information, interpreters and exhibits should pose questions and offer alternative ways of looking at the past. In this way, visitors including students would be encouraged to use critical thinking skills to evaluate what they are seeing.

Archaeology can play an important role in this change. Excavations are a popular draw at the plantation and interpretation at the archaeological sites provides the visitors contact with researchers. By concentrating research interests in different areas on the plantation, archaeology can shift the weight of interpretation away from the mansion. Since excavations recover artifacts from both before and after 1799, archaeology helps to rehistoricize this ahistoric landscape. Finally, since excavation inevitably leads to the discovery of something previously unknown, archaeology also points out the boundary between what is known and what is not known. Visitors realize that the past is something that is in the process of being made and understood, not something that is finished (Leone, Potter and Shackel 1987).

Museums must recognize the ideologies implicit in their interpretation and exhibitions, and make them explicit. They should do this not simply because it exposes bias, but also because museums play an important role in disseminating visions of history and shaping the public conscience. Since they can no longer hide behind the myth of objectivity and authenticity, museums need to be aware of the social implications of their messages. This need not lead to some form of interpretive anarchy. The point is not to make up stories, but to provide multiple perspectives on the past. Mount Vernon can tell stories about power, gender, and race while remaining true to the historical data and true to Washington. It only has to want to tell these stories.

[An expanded version of this paper was presented at the symposium, "Mount Vernon: Transformation of an 18th-Century Plantation System," Society for Historical Archaeology Annual Meeting, Richmond, Virginia, January, 1991.]

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ANTHROPOLOGICAL PERSPECTIVES ON AGING

"What is one of the good things about being an old person?" --Pat Draper, Anthropologist

"There is nothing good about being old. An old person can just sit and think about death. If you have a child who takes care of you and feeds you, you have a life." --!Kung informant, western Botswana.

Old-age is often considered to be a unique biological characteristic of modern humans. Physical anthropologists tell us that like most other mammals our distant ancestors rarely if ever lived beyond their reproductive years. One evolutionary explanation for old age holds that females who lived longer but whose fertility was curtailed in later adult life were more successful at rearing their last born children, and may have contributed to the reproductive success of their earlier children.

Today, however, many of us live in societies that are grappling with the "problems" of the elderly, and in which the elderly seem increasingly divorced from the productivity and success of everyday life. How similar or different are the lives of elders in modern, complex society as

opposed to the lives of elders in more traditional, simple societies? Are there more elderly in our society than in others? Are the elderly in other societies happier or better cared for than in America? How old is "old"? What defines an old person? a "middle-aged" person? Is old age a "good" time of life? Are elders respected, or given special status? Why or why not? What kinds of circumstances make for a happy old age or an unhappy one? These and other questions have given rise to a new cross-cultural study of aging, being carried out in seven different locations.

THE CROSS-CULTURAL STUDY

Central to anthropology is a cross-cultural perspective which asks the question, "How does the human experience differ from one society or cultural tradition to another?" As many times as this comparative question has been asked, researchers have had to grapple with the problem of what aspects of experience to compare across societies. For example, in the U.S. older people value independence. They and their younger kin go to great lengths to arrange for the financial and residential



independence of older people from younger kin. However, in many traditional societies independence of the generations is neither valued nor a practical goal. Therefore, a cross-cultural study of how elders achieve independence in old age would be ill advised. The Project A. G. E., described more fully below, attempted to avoid such pitfalls by investigating the meanings attached to old age by members of each of several selected communities.

Project A.G.E. (Age, generation, and experience) is a long-term, cross-cultural study of aging funded by the National Institutes of Health through the National Institute on Aging, and directed by C. Fry (Loyola Univ. of Chicago) and J. Keith (Swarthmore College). This research project was designed to minimize the opportunity for western or American assumptions about successful aging to be imposed on respondents in other culturally distinct communities. The study involves seven different anthropologists and locations in five cultures: !Kung villages of Northwestern Botswana (Draper); Herero agro-pastoralist villages of Botswana (Harpending); four neighborhoods in Hong Kong (C. Ikels); Blessington, Ireland, a suburb of Dublin (J. Dickerson-- Putman); Clifden, Ireland, an isolated seaside town in County Galway, Ireland (A. Glascock); Swarthmore PA, a suburb of Philadelphia (J. Keith); and Momence IL, a small rural community situated a two hour drive from Chicago (C. Fry).

The seven communities were deliberately chosen to maximize diversity in the sociocultural variables: size, social complexity, economy, mobility, scale and technology, all thought to influence both the sense of well-being of the elderly and their participation in society.

The focus of the project is not simply to study "aging" but to understand how culture shapes the structuring of social roles across the lifespan. All researchers but one had previously carried out fieldwork as participant observers in the culture under study. Each researcher spent at least one year in the research site. Before any formal interviewing was done for Project A.G.E., each researcher spent several weeks in the community eliciting information about the vocabulary and semantics of age

terminology, so that the basic interview questions could be framed in terms comprehensible to the respondents. The plan called for 200 interviews at each location; 150 subjects evenly divided by sex and (adult) age category, and an additional fifty from the two oldest age groups. Questions about aging were phrased in such a way that differences in people's attitudes about aging (both within and between cultures) could emerge.

Questions in five different categories concerned:

1) terminology and differentiation ("What do you call people of different ages, and how are they different? What are the best and worst aspects of each? What age group are you in?")

2) transitions between age groups ("What happened to you to change you from your former age group to your present one? How will you know when you have moved into the next age group?")

3) feelings about age transitions ("Do you like your present age? How do you feel about entering the next age group?")

4) evaluative questions about the age groups ("In what age groups do you know the most or least people? What age group are you most comfortable with? What are the best and worst ages to be?")

5) past and future questions ("Are you better off now than you were 10 years ago? What do you imagine about your life five years from now?")

PROBLEMS OF RESEARCH AMONG THE !KUNG

These and related questions were readily answered and yielded abundant interesting data in the two American sites, in Hong Kong, in the urbanized Irish community (Blessington) and among the Herero. In contrast, the more rural Irish (Clifden) and the !Kung were alternately puzzled, irritated, and amused by the age questions. Many grew visibly anxious at not being able to provide answers. Since both the Irish and the !Kung are famous (at least in anthropological circles) for their talkativeness, this result in two independent

communities was puzzling. The informants knew the researchers well and appeared comfortable with them, and great care had been taken to phrase the questions in the local idiom. Moreover, aging and senescence were familiar to every informant. What, then, accounts for the relative failure of this approach in these two sites?

What informants in these two communities share is a low "salience" of aging categories. That is, although age terminology may exist, people do not categorize or identify particular people by their age, nor do they readily generalize on the basis of age. For example, a !Kung informant was asked, "What do you call people of different ages?"

Respondent: "Oh, they have all kinds of names. There's John, Sue, Jane, George..."

PD (Pat Draper): "No, I mean, when people have different ages, how do you distinguish among them?"

Respondent: "Well, that's easy. Come on over here and I'll point them out to you. See, there's Jane and Sue is over there. John isn't here now but George...."

In this society, personality, residence, sex, health are more important than age in distinguishing individuals. From start to finish, interviews with the !Kung were like pulling teeth.

PD: "So, you say that for women you would use four age terms...young, ...middle-aged, ...elder..., and aged. ...For example, let's start with the young women. What is it about the young women that makes them alike? What do they have in common?"

Respondent: "What do you mean alike? They're nothing alike! I've already told you that. Some of them are hard workers, others are lazy, some of them have children, others have no children. What makes you think they are alike? They are all different."

Throughout the study, informants failed to identify age as the key part of the questions.

PD: "If you were at your village one day, and there wasn't anyone to talk to, and you were sort of lonely, wishing for conversation, what age person would you most like/not like to have visit you?"

Respondent 1: "Why would I be alone at the village? If I were alone, I wouldn't want anyone to visit me."

Respondent 2: "Well, I would prefer that someone I knew would visit me."

Respondent 3: "I don't like to be visited by a Herero."

Respondent 4: "Anyone who visits me is welcome. I don't refuse anyone! Children, old people, young adults, they are all welcome. If I have tobacco we will sit together and smoke and talk."

Questions about how many acquaintances an informant had in each age group were unanswerable by !Kung informants who had no indigenous system of counting above three, and rarely use "foreign" number systems except for counting cows. The questions about past and future were defeated by the strong theme of empiricism and practicality in !Kung world view.

PD: "If you could be any age you wanted to be, what age would you be?"

Respondent: "It is not possible to change your age. How would that happen?"

Questions designed to elicit cultural norms or individual feelings about moving from one age to another were also unsuccessful.

PD: "...what happens, for example, in a woman's life to move her along?"

Respondent: "Age, just age."

PD: "Is there nothing else you can tell me about what happens that makes the difference between, say, a middle-aged woman and an elder woman?"

Respondent: "Well, you see, it is the seasons. First it is winter and dry, then the rains come and then that season is past and then the winter comes along again. That is how it happens that you get older. Now do you understand?"

In addition to these problems, the short question and answer format of individual interviews violated the normal rules of discourse among the !Kung. In their conversational style several people

participate in turn, each speaking for several minutes. Nevertheless, a small number of informants (far below the 200 target sample) did become interested in the issues and provide interesting and informative data on this topic (see below).

PROBLEMS OF RESEARCH IN RURAL IRELAND

Like many communities in rural Ireland, the population of Clifden has been dramatically affected by emigration. If children are excluded, over 25% of the adult population is over 65, in contrast to 19.1% of the adult population of Swarthmore, another study site. In addition to questions of the type posed to the !Kung, residents of Clifden were asked to sort a series of cards on which were written a brief description, e.g. "a widow who lives in a nursing home, with married children and grandchildren." Age was not mentioned on the cards and respondents were asked to sort the cards into age categories and were asked questions about their categories. Over half of the respondents could not complete this task, since, as in the !Kung example, people rarely think of each other in age categories, and generalization based on age has a low "salience". One Irish woman began to ask questions about a card which described a hypothetical person as "A married woman, daughter takes care of her and her husband, has great-grandchildren."

Respondent: "Ah, about what age was she when she married? If she married quite young, she wouldn't be that old."

AG: "I can't say, you have to use what is on the card."

Respondent: "Well then, was her first child a daughter?"

AG: "I don't know, she is not a real person."
Respondent: "How old was her daughter when she married?"

AG: "I can't say, all I know about her is what is on the card."

Respondent: "Ah now, it wouldn't be possible for me to say who this person is without knowing something about her."

Respondents had little trouble naming "women living on Bridge Street," but experienced considerable difficulty in naming "older women living in Clifden." Questions about "How does your health compare to other people of your age" were answered in many cases by responses such as "I couldn't say, really. Everyone's different and there's no way to say just one thing." In addition, as among the !Kung, the standard questionnaire format violated the normal rules of discourse, which among the rural Irish is indirect and allusive. For example, the local people communicated in various behavioral ways the irritation they felt with the probing nature of the card sort: they moved away from the table, looked away, crossed their arms, changed the tone of their voice. All these behaviors disappeared when the card sort and the interview were finished.

Despite methodological problems, such as the evident absence of a universal age category of "old" and the difficulty people in many societies experience in being asked to categorize people into age classes, the study has yielded interesting results.

AMERICA'S ELDERLY ARE NOT UNIQUE

In the US, society's treatment of the elderly and the problems of eldercare are prominent issues for politicians, community organizers, public health workers, authors and TV producers, religious leaders and even the courts. We often imagine that the problems of our society are unique, that we have more elders than ever before, that they are lonelier, more childless, more single and therefore more dependent on strangers than in other societies. The study, however, suggests that the proportion of individuals over 60 (19% in Swarthmore, 30% in Momence) in the American study sites is not greater than in some of the other sites. In Clifden, Ireland, for example, more than a quarter of the adult population is over 65, and the proportion of elderly among !Kung and Herero adults is slightly larger than in Swarthmore.

Nor are Americans less likely to have children. In America we often hear that declining birth rates coupled with greater

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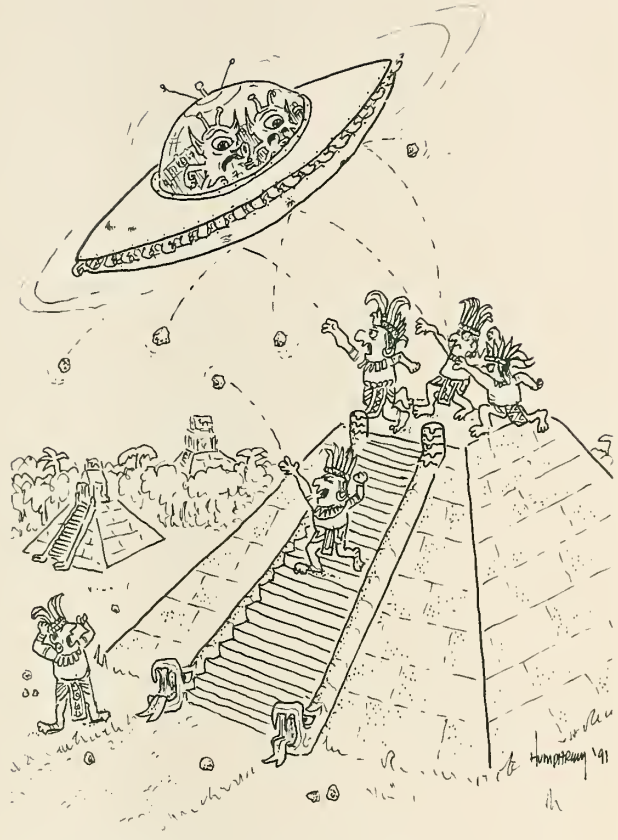
BOOK REVIEWS

Feder, Kenneth 1990. Frauds, Myths, and Mysteries: Science and Pseudoscience in Archaeology. Mayfield Publishing Co.

This informative book presents the essentials of the scientific method employed in professional archaeological work and explains how archaeology differs from revelations and irresponsible creations. It is a compact, eminently readable book with many examples, including a review of the Cardiff Giant of central New York, a fraud of the later 1800's; and the Piltdown, England Hoax, or why "The First Englishman" has the lower jaw of an ape.

A large part of the book refutes various wild ideas about the original peopling of America. They were not from Europe, the Near East, China, outer space, or North, South and Southern Africa. Subsequent to the original penetration of North Asiatic Mongoloids about 15,000 B.C., neither the high cultures of South America, Middle America, nor North America were the result of the intrusion of people with high culture from Europe, Africa, or Asia. The interpretation that "The Mound Builders" were a superior group of people from the later "savage" Indians is false. Feder however makes the mistake of thinking the Smithsonian Mound Survey of the 1880's was the major force in certifying that the Indians were the Mound Builders. Rational thinkers had thought that for decades.

The book also relates such famous sites and artifacts as Mystery Hill and Newport Tower in New England, the Grave Creek engraved disc, and the Davenport, Iowa, tablets. Other fallacious concepts such as Atlantis, psychic archaeology, the ideas of Barry Fell, scientific creationism, the Turin Shroud, and Noah's Ark and the Flood are all discussed and dismissed as preposterous as serious archaeological explanations.



Williams, Stephen 1991. Fantastic Archaeology: The Wild Side of North American Archaeology. The University of Pennsylvania Press.

This volume by Stephen Williams, a distinguished archaeologist at Harvard University's Peabody Museum, is one result of some 45 years' concentration on the study of American archaeology from the first migrant invaders into the North American continent. It has the broadest coverage and is the most intensively researched study of the multitude of demonstrably false interpretations and contrived fakes made in the recent past for money, fame, or notoriety or to form an insecure, sandy foundation for an ethnic group or sect.

(continued on the next page)

Williams emphasizes how responsible professional archaeologists investigate new sites or artifacts to test the validity of statements about them by innocent finders or manipulative quacks, rogue professors, and downright scoundrels. Fakes or frauds have been found in at least thirteen states; in some of them their manufacture almost seemed to be an industry. In Canada, perhaps the most famous misinterpreted find was the Beardmore relics, which were genuine Norse items but not evidence of Norse presence in 11th century America, a view which the uncritical curator of archaeology in the Royal Ontario Museum in Toronto had accepted. Williams also comments on many well-known and lesser known artifacts of non-Indian manufacture and on misinterpretations by laymen and professionals about the antiquity of humans in the New World, or on intrusions of civilized groups from the Old World bringing real "culture" to the "savage" natives.

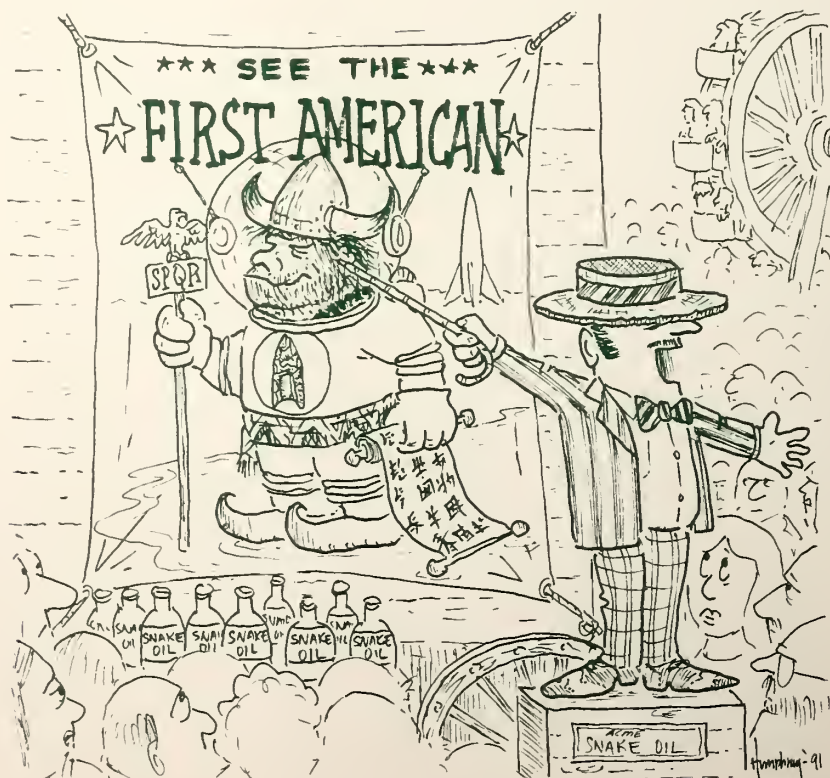
Williams is particularly critical of some former Harvard professors, including Leo Wiener who was one of the early instigators of the idea that Africans had an important

influence on prehistoric American cultures. This is simply not true. Non-Harvard professors from North Carolina and California are included in his presentation of individuals incapable of evaluating evidence.

This is a book to cherish and enjoy. The book demonstrates once again how many ways there are for people to mislead other people, particularly in areas where emotions become involved in objective assessments of scientific evidence.

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TEACHER'S CORNER: RESOURCES FOR TEACHING ARCHAEOLOGY

The Education Resource Forum, a display of instructional materials designed to help educators to incorporate archeology into their classroom strategies, was exhibited at the Society for American Archaeology meetings in New Orleans in April 1991. An accompanying resource guide, listing more than 100 publications, resource guides, teaching manuals, posters, games, and computer simulations that comprised the exhibit, is available free of charge from the Smithsonian Institution. To obtain a copy, write to the Anthropology Outreach and Public Information Office, Department of Anthropology, MRC 112, National Museum of Natural History, Smithsonian Institution, Washington, DC 20560.

Assembled by education committee members of the Society for Historical Archaeology and the Society for American Archaeology, the Education Resource Forum is coordinated by the Intersociety Work Group (IWG), a committee representing national agencies and professional organizations involved in archaeology education for the public. The IWG hopes to make the display available for regional and national meetings of groups that also are interested in sharing instructional materials relating to archaeology. In addition, the National Park Service plans to publish an annotated version of the resource guide in spring 1992. Write to: National Park Service, Archeological Assistance Program, P.O. Box 37127, Washington, D.C. 20013-7127.

Individuals who wish to inquire about the availability of the exhibit, or who wish to donate instructional items for inclusion in the Education Resource Forum, should contact KC Smith, Museum of Florida History, 500 South Bronough Street, Tallahassee, FL 32399-0250; (904) 487-3711.

One selection from the resource guide is reprinted below.

GAMES AND COMPUTER SIMULATIONS

Adventures in Fugawiland: A Computer Simulation in Archaeology by Doug Price and Gitte Gibauer (1990).
Mayfield Publishing Co., 1240 Villa St.,

Mountain View, CA 94041
Order #: IBSN 0-87484-948-9
Audience: high school and up

Bafá Bafá

Simile II, P.O. Box 910, Del Mar, CA 92014
Audience: Grades 5-8

Dig 2 by Jerry Lipetzky (1982)

Interact, P.O. Box 997-S2-91, Lakeside, CA 92040. Order #: 5030
Audience: Grades 6-9

Fun with Hieroglyphs by Catharine Roehrig. Metropolitan Museum of Art (P.O. Box 255, Gracie Station, New York, NY 10028) and Viking Books, New York, NY.

Order #: D113OE
Audience: Elementary and up

Mummy's Message by Tony Maggio (1989)

Interact, P.O. Box 997-S2-91, Lakeside, CA 92040. Order #: 5062
Audience: Grades 6-9

Mystery Fossil: A Physical Anthropology Laboratory Exercise for the Macintosh by John Omohundro and Kathleen Goodman (1990)

Mayfield Publishing Co., 1240 Villa St., Mountain View, CA 94041.
Order #: IBSN 1-559340-019-3
Audience: High school and up

Puzzle by John McLure (1972)

Interact, P.O. box 997-S2-91, Lakeside, CA 92040. Order #: 3061

Pyramid Explorer's Kit (1991)

Running Press, 125 22nd St., Philadelphia, PA 19103. Order #: 80318
Audience: Upper elementary and secondary

Rafá Rafá

Simile II, P.O. Box 910, Del Mar, CA 92014.
Audience: Grades 5-8

Time Capsule by Don Eells (1978)

Interact, P.O. Box 997-S2-91, Lakeside, CA 92040. Order #: 5030
Audience: Grades 5-12

Talking Rocks by Robert Vernon

Simile II, P.O. Box 910, Del Mar, CA 92014
Audience: Grades 5 and up

KC Smith
Museum of Florida History

THE POETICS OF POWER: SUMBA AND BEYOND

In literature class, we tend to teach poetry as isolated texts that we analyze to derive meaning. As a result, poetry is often seen as a marginal and somewhat effete literary form whose audience is largely intellectuals. We forget that poetry in most societies is a performance art in which text, expression, motivation, and the audience interact to create events of great emotional, political, and social power. To what extent is verbal art, the performance of poetry, central to the understanding not only of the poem but also of language and other culture forms?

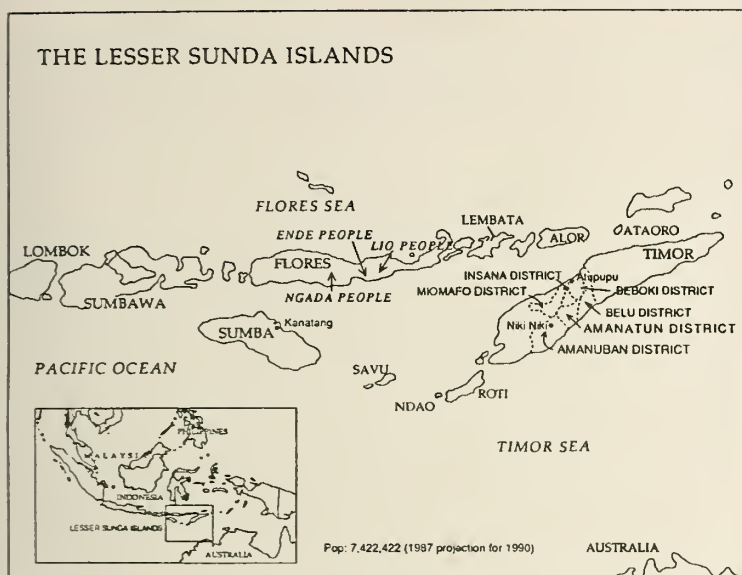
In Indonesia, an island nation stretched out in a 3,000 mile arc between China and Australia, one can find elaborate and sophisticated traditions of poetic performance among the 350 language groups. The leather shadow puppet shows of Java, the masked dances of Bali, and song duels of Sumatra are among a few of the most famous. For many Indonesians, however, speaking poetry is not only an aesthetic experience, it is an exercise in spiritual and even political power. People employ verbal art to comment on, legitimate, and even establish authority for key social institutions such as law, religion, medicine, and politics. But as the Indonesian central government seeks to modernize and create a homogeneous "national culture," it has run into conflict with local minority groups' traditions of poetic performance.

When I returned to the Weyewa highlands of the eastern Indonesian island of Sumba in the summer of 1988, I learned that the lively and elaborate ritual speaking events that I had studied for the past ten years had been officially banned as 'wasteful' and 'backward.' The whole series of ceremonial performances by which men use a poetic speech style to construct the most authoritative and sacred texts in their culture is now against the law. Nonetheless, I had no trouble getting research permission to study this illegal style of communication, because, as one official in the Ministry of Culture informed me as I cleared my papers, I was studying linguistic and literary forms, "you know, the grammar and poetry." Indeed, the couplets on which this ritual style is based are not against the law; the regional government has even asked me to prepare a textbook for elementary school children in order to teach them how to read and write in their own language using these couplets as the text examples. Nor were the myths banned that these performances enact. Again, the Ministry of Culture showed a real interest in printing some of these texts for educational purposes, in order to develop an emerging category--a national folklore.

What are banned are the poetic events as performances. On the one hand, the poetic texts as marginal, aestheticized objects, are safe, but on the other, the poetic texts as action are viewed as dangerous. Why? What is it that happens when people actually use



POETICS AND POWER



language in situated action? What is the role of poetic and aesthetic activity in social life?

Government officials seem threatened by the view of poetics as a shaper and inscriber of social life; they seem more comfortable with the view that it is a marginal, derivative albeit pretty feature of the social world. But as many recent articles and books have forcefully brought home, strict attention to the referential content of words overlooks the "meta-messages" about social relationships, social situation, and personal feelings also conveyed in a message. Deborah Tannen has argued vividly that the style through which messages are transmitted is often the crucial factor in making or breaking human relationships. In her recent 1990 best-seller, *You Just Don't Understand*, Tanner analyzes men's speech to show that it is designed to assert and establish dominance, while women's speech style promotes co-operation and compromise. Style--the manner in which communication is accomplished--is not a parasitic or marginal aspect of the communicative process, but part and parcel of it. The message of ritual Weyewa poetic performance is the centrality and authority of the ancestral spirits in the lives of the Sumbanese, a message that challenges the sovereignty of the secular Indonesian state. By banning ceremonial performances, the Indonesian government asserts its

dominance as the only legitimate authority in peoples' lives.

WEYEW A RITUAL SPEECH

In my research (see Kuipers 1990), I have been particularly interested in how the Weyewa manage to use a poetic style to create authoritative texts, which they say represent the true 'words of the ancestors.' According to Weyewa ritual leaders, these texts provide a kind of charter of the rights and the obligations that these people have to their ancestors and to their fellow descendants.

When I first arrived on the island in 1978, I studied this remarkable parallel style of speaking by

focussing on its use in divination, prayer, and myth recitations. Weyewa encouraged me to focus on the couplets themselves, and I memorized over 1500 of them in order to become a performer. In each couplet, the first line parallels the second in rhythm and meaning. For example,

ndara ndende kiku
horse with a standing tail

bongga mette lomma
dog with a black tongue

This couplet refers to a 'good orator,' because such a person would be lively and high spirited like a horse with a 'standing tail.' Effective speakers are also often likened to dogs with 'black tongues' since the latter are considered good barkers.

I soon learned, however, that in order to understand and transmit the deeper messages conveyed by ritual speech, I had to look past the formal poetic patterns of the couplets, and the (often very enchanting) references of the metaphors, and pay close attention to the stylistically important but often ignored "filler material" that poets used to connect the couplets and verses to one another. Using pronouns, conjunctions, and other connecting phrases --or by strategically omitting such connectors--these performers make poems that are more than isolated objects of beauty; they create sacred objects of ancient authority.

Among this rural agricultural people, the importance of creating spiritual coherence through poetic speech is especially clear following a misfortune--the death of a child, a fall from a tree, a crop failure. This is viewed as a result of a broken promise to the ancestral spirits and a neglect of the 'words' embodied in the ritual speech of the ancestors. Divination is the first stage of atonement in which a specialist performer tries to identify the broken 'word' or promise to the ancestors through poetic dialogue with the spirits. If the victims have the feasting resources and the determination, the second stage usually occurs a few hours or weeks later. It is a spectacular, all-night ritual dialogue in which the broken promise is re-affirmed. The final, climactic stage is when the promise is fulfilled and the charter myth of the founding of the agnatic clan (on the father's side) is told. It is here that the 'true voice of the ancestors' is revealed.

In the short text below from the first phase of a "misfortune" ritual, a diviner humbles himself before the spirit by comparing himself to a jar with tiny lips and a bottle with a small mouth, but then proceeds to break out of the couplet frame by saying "take this rice"..."right there by you."

wíwi ána sádda

I am like a jar with tiny lips

máta ána nggósi

I am like a bottle with a small mouth

máma yása!

take this rice!

nenna

right there by you

Divination as a form of oracle gets its authority and legitimacy from the way in which the performer speaks directly to the needs of the suffering client. The client wishes to feel a sense of connection with the ancestral spirits from whom he feels alienated, and the diviner supplies this connectedness with the highly interactive language (e.g. "here!" "right there by you" "over there" "and then you said...."), despite the fact that the performance is a monologue.

Compare this short text then with the final stage of atonement for a misfortune--a 'blessing song.' In these songs the singer wishes to describe the moral foundation of

the whole clan as a kind of journey in which a prominent mythic ancestor establishes all the sacred practices and obligations--its ritual duties, marriage alliances, and village and house designs.

Nyákkana pasámakongge láwina

therefore the tip is matched

nyákkana pamérakongge pú'una

therefore the trunk is parallel

néwe wólo innangge

these deeds of the Mother

néwe ráwi ámangge

these works of the Father

Wé'e Maríngi O-oo

Cool Water O-oo!

tédamúni náwwangge

wait for this one [named]

Mbúlu Nggólu Wólangge

Mbúlu Nggólu Wóla

a lóggena kadíppu runda rangga

whose hair is silver dewangga cloth

kadíppu mbáli mbónnungge

a piece of gold from abroad

Unlike the more interactive and involved divination performance, the singer of this poem seeks to create the image of a detached monologue stripped of references to the "here and now," in which there is no opportunity for the audience's voice to intrude, challenge, and modify the authority of the text. It consists only of couplets, with few pronouns or other connective devices to link it to the actual social situation of use. The formalization process by which texts acquire authority and power is known as "entextualization," in which texts are increasingly patterned linguistically and poetically at the same time as they are increasingly detached from their context of performance.

But while the Weyewa describe this performance as an ancient, transcendent text from the 'voice of the ancestors,' in fact, it too, is linked to its social context of performance, but in more subtle ways. For instance, in the recounting of the tale, the speaker selects the names of certain ancestral figures who are related to the principal sponsor of the event, so as to make the sponsor appear more central in the history of the lineage.

The process of entextualization has relevance well beyond eastern Indonesia. One area where this attention to the role of poetic organization in social life seems relevant is in the analysis of medical discourse, where the immediate, situated speech of the patient-doctor interview is eventually recoded into the detached and scientific medical terminology of the physicians' report. Errors and misunderstandings often occur not only in the face to face interaction per se, but over the course of this entextualization process (see Kuipers 1989).

THE POLITICS OF FEMALE POETRY

The ban on ritual speech events is a powerful and effective challenge to the authority of the patrilineal clans. This has not silenced the women and other unpaid performers of ritual speech, who are often marginal to those clans. Women's ritual poetic speech is highly personal, spontaneous and often autobiographical. These poems are sung at harvest celebrations or in other intimate or family contexts. A performance in this style carries the message that the speaker is marginal to the power structure of the society as a whole. Since the ban on men's ceremonial poetic performances, women's poetic performances increasingly convey messages of political protest. More men are performing the poems in the contexts once thought of as "female" and in the process, conveying the men's own feelings of marginality to the central power structures of Indonesia. The changing nature of poetic performances once thought of as "female" calls into question the practice of fixing texts--through ritual, literacy, or law.

An example of such a performance is the following ironic song that tells the tale of a young woman who feels the power of a new kind of text--a love letter from a non-Sumbanese police officer luring her to the west Sumbanese capital for "education." When she has an illegitimate child by him, she urges her kinfolk to consider the 'words of the ancestors' and accept her back into the family. Part of the song's poignancy derives from the conflict between foreign modernity and the traditional authority of the patrician. Accepting the girl back means to give priority to personal feelings, individual desires, and government

programs of education and religious modernization over the lineage's traditional right to demand brideprice from the policeman. As with many personal songs, the performance of this song was specifically solicited--in this case by me. The performer was a young woman who heard the song from a friend while attending junior high school.

Hitti-ki-po manna

Way back then

ku masi ana muda

when I was a young child

ammi nome polisi komidani

a police commander came visiting

na kirimo-ngga suratu

he sent me a letter

terima dua tangan....

I accepted it with two hands.... 5

"kako-nggo-we ole

"go ahead my friend

ne kota Waikabubako

to the town of Waikabubak

wewe-nggu-ndi pānde

and seek after knowledge

ne kantora mandyangga"

and high office"

ne pa-oro lénge-léngemo

What was truly the main source [of problems] 10

ne zurata pa-tulita

was that letter which was written

After she became pregnant, then she returns to her village. In a scene strongly reminiscent of traditional orphan tales, she pleads for mercy from cruel kinfolk.

ku-ndunni bali oro-nggu

I returned in my tracks

ku-zangga bali ziwu-nggu

and I retraced my steps

mainda itto ole

come on my kinfolk

a paditto lolo lende

who share an umbilical cord 15

kata mata moro etawa

let us all see with open eyes

na ana woro ndobbanda

let us all gather together

ka nda takinda-ka-ni koko

so that our throats feel no revulsion

ka nda talabbo-ka-ni ate

so that our livers are not blistered

ate-ku-mi na'a

look into your heart, older brother 20

a balleku malara

to reverse your pungent feelings

koko-ku-mi na'a

it all hangs upon your neck, older brother
kubbuku manili

to splash [water] on your hot feelings

lángoko pa-deito-ko-ngga zala

even if you bear resentment towards me
ku-ndara nggole wello

I am like a blameless fallen horse 25

lángoko pa-toddu-ko-ngga palu

even if you heap beatings upon me

ku-kari teba kadu

I am like an innocent hornless water
buffalo

ku-wúnggu wai-ko-ngga limma

I carry in my hand

li'i ukku a Marawi

the voice of the Creator's covenants

ku-billu wai-ko-ngga béngge

I stuff it in my waistband 30

li'i ukku a Mawolo

the voice of the Creator's law.

This genre of 'personal songs' forms a category of ritual speech sharply contrasting with the authoritative discourse of collective ritual. Unlike political and religious genres, this song is not addressed to spirits but to actual specific individuals. Unlike ceremonial performances, the encounter is not conducted with close attention to reciprocity, exchange, and hierarchy. Most striking of all is the general assault on the traditional patterns of entextualizing discourse: i.e. the use of couplets, the creation and maintenance of a consistent ceremonial frame. She deliberately violates couplet conventions for emotional effect. For instance, the completion to the couplet beginning on line 15 should have been 'whose heads proceeded [down a single birth canal].' In ritual discourse, such an infraction results in a fine to the speaker of at least one cloth, and possibly supernatural retribution. Also, most distinctively, she switches into Indonesian --something unthinkable in ritual performances. One example of this is line ku masi ana muda 'when I was a young child' and line 5 terima dua tangan 'received with two hands.' In this context, in a ritual speech performance, such usages have a jarring, ironic effect. Unlike men's performances, such stylistic inconsistencies do not have the effect of linking the speech to the dialogue form of participation, but function instead to enhance its emotional expressiveness (see Irvine 1982, 1990) and evoke the inner state of the performer.

Taken together, these features contribute to shape a speech event that is neither a negotiation with implied dialogue or an authoritative monologue, but instead constructs what many Weyewa seem to regard as a challenge to the whole notion of fixing (or inscribing) the 'words' of the ancestors. When I played this tape to one Weyewa elder to ask for his interpretation, he said "she's lost the tracks, the trail of the ancestral spirits." She does not follow the inscriptions.

CONCLUSION

Examples such as the ones sketched here I hope provide a glimpse of the centrality of the poetic performance to an understanding of the role of language in social life. As long as we persist--like our Indonesian government officials--in walling off the stylistic features of language use from other arenas of culture, we will be stuck in a limited view of communication, and the relationship of language to arenas of power and social control will be obscured.

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("Aging," continued from p. 4)

longevity have produced increasing numbers of old people with only one or no surviving child to provide care in their parents' old age. Yet, here as well, Americans are not extreme. About 90% of the elderly men in the Swarthmore study and 82% of the elderly women had at least one child, in sharp contrast to the !Kung, among whom about 30% of the elderly were childless, although in the latter case, a number of parents had outlived their children--only 12-13% had never had a child. A similar pattern was observed among the Herero, 25% of elderly women were childless, but about half of these women had borne children who later died. In rural Ireland, more children survive but fewer adults have children. While only about 12% of elderly women were childless, fully 63% of elderly men had no offspring.

Americans also tend to think that the feminization of old age, and the tendency for older women, in particular, to be unmarried or widowed is an artifact of demography and is universal. The A.G.E. study suggests that customs and values surrounding marriage have a greater effect than demography on the household composition of the elderly. Elderly people of both sexes in Swarthmore were as likely to be married as were the !Kung. For example, about one-quarter of the women and a smaller percentage of the men in each group were widowed. The !Kung value companionship in marriage and will remarry after the death of a spouse. Among the Herero, on the other hand, while three-quarters of the elderly men are married, three-quarters of the elderly women are single, widowed, or separated. In this society, marriage sanctified by the exchange of cattle, is generally contracted between older men, who have the most cattle, and young girls. Only 6% of the women never married, but widows do not remarry, and, in any case, do not look to their husbands for care or companionship. In Clifden, Ireland, in contrast, only about a quarter of elderly men and women are married. While over half of the elderly women are widowed, almost half of the elderly men (44%) in this community have never married. This phenomenon has been variously attributed to emigration and the absence of economic opportunity in a

culture where men are expected to support wives and children. Unemployment among men is currently 35% and about three out of every five adults have lived overseas for at least one year.

It has been argued that the US is such a mobile society that even if older people do have children, they rarely live close enough to be helpful. Among the !Kung, the Herero, and in Clifden, a large proportion (77% to 85%) of the elderly who had children had at least one living nearby. This proportion was somewhat smaller in Swarthmore, but of the Swarthmore elderly with children, about 60% had at least one child living in Swarthmore or within one hour's travel time. While child mobility is greater in the American sample than among the !Kung or Herero, it is even greater in the Irish sample. Many of the children of Clifden residents have emigrated and live abroad. The study found that 90% of the older people with children had at least one child overseas.

WHO CARES FOR THE ELDERLY?

In all the study sites, families, loosely defined, provide the majority of eldercare, whether this is limited to economic assistance (provisioning) or extends to help with daily tasks. Yet both the definition of responsibility for eldercare and the type of care expected differ markedly from site to site. In the US, elders expect to be financially independent, even when they need help with daily tasks. In rural Ireland, where so many of the elderly, particularly men, are unmarried or childless or whose children live far away, and where economic assistance is provided by the state, daily or occasional help with living tasks is often provided by collateral relatives such as siblings, nieces and nephews, or simply by close neighbors. About one-quarter of the Clifden elderly have no close relatives at all in Clifden, and about a third of older men have only one close relative in the community, usually an older sibling. A third of the elderly in this community live alone. Among the !Kung, who have no government help or stored capital, food and other economic assistance, as well as help with daily tasks, is expected from adult children but may also be provided by other close relatives living together in a small village. The presence of two or more adult

children was correlated with an increase in the life expectancy of elderly mothers, but not of elderly fathers. Young children are not expected to care for the elderly on a regular basis. Because of remarriage, spouses are more available for care among the !Kung than among the Herero or Irish.

If demography accounts for all the differences in eldercare, why aren't the elderly Herero, with their high rate of childlessness and large number of old unmarried women, in trouble? Instead, the proportion of elderly Herero in the adult population, in general, and among women, in particular, is slightly higher than among the !Kung. Each Herero belongs to a cattle-holding lineage group, whose members are responsible for the economic well-being of its members. In addition, much as Americans and other societies derive great self-esteem from the care given to their children, a Herero draws more of his or her self-esteem from the care given to parents and older relatives. Since many elders are childless or have children away at school, young children are loaned or even fostered out to elders for the express purpose of providing care. Approximately 40% of all Herero children are reared by foster parents.

What happens when an elderly individual becomes frail and unable to care for himself or herself? In rural Ireland, behaviors that would signal end of independent living in America--leaving the stove on, forgetting to turn on the heat, inability to drive, falling down the stairs, not recognizing friends and family--do not endanger the person or others to the same extent as in America. Houses do not have second stories, most older people do not drive in any case, and shopping can be done on foot. Neighbors and the community's visiting nurses make sure that the chimney has smoke coming out of it on a cold day. An old man who does not really recognize his surroundings might be escorted to and from the pub, where he will spend the day in a warm corner. Inappropriate behavior is explained as "he's a bit mental, you know."

ARE THE ELDERLY HAPPY?

One of the striking contrasts is the degree to which elderly Americans described themselves as happy, while the younger

members of the American population were more negative in their self-evaluations. Americans place great emphasis on economic independence, and the elderly have this to a greater extent than the young and middle-aged. The elderly Irish of Clifden were also very happy with their lives, in part because they have a degree of economic security in the government dole, in part because they have access to good, almost free, low-tech health care. Two doctors and several visiting nurses make sure that every sick or frail individual is seen on a daily basis if necessary. The Clifden elderly also remember that life was much harder in this community 40 to 60 years ago, when they were young. The !Kung elderly, in contrast, rated their quality of life low, but only slightly less than the self-ratings of the middle-aged. Old Herero were at the opposite end of the scale in describing their age in the most pessimistic terms of any age group, despite what an outsider might see as a very high level of social support. In a somewhat rosy view of an imagined past in which old age was happily spent in the bosom of one's family, we tend to forget that modern society has mitigated many of the real discomforts of the elderly. The good to excellent level of social support routinely available in the two African sites cannot begin to compensate for the absence of furniture, mattresses, running water, central heat, antibiotics, eyeglasses, Tylenol and false teeth.

A source of unhappiness in the American communities but less so in Ireland or among the Herero or !Kung, was the degree to which American elderhood is marked by abrupt transitions, such as retirement or change of residence in order to be in a more manageable house or nearer to a child. Elders in the other societies more often continued their adult patterns of work, residence and social interaction into elderhood. The abrupt transitions that mark elderhood in America, and which are less pronounced in a rural community like Momence, are in part a corollary of the economic independence and wealth of elders. If private housing were uncommon and economic interdependence the norm, elders would find it easier to get help without compromising their cultural values.

(continued)

THE A.G.E. PROJECT

The comparison of aging in seven locations has demonstrated that the living conditions, concerns, and even the definition of the elderly are strongly conditioned by cultural values and societal variables. Very different networks have been developed for caregiving in each society. The relatively high status of elderhood in some societies (e.g. in China, or among the Herero, where the elders nominally control the ownership and disposition of lineage cattle) does not appear to be correlated with happiness among the elderly. Though elders in more traditional societies are more likely to remain situated in supportive families and familiar communities, they feel keenly the physical losses of aging under circumstances where there are few cushions or prostheses to ease their discomforts. Indeed there is a fine irony in the finding that traditional and modern societies satisfy different and mutually exclusive goals of the elderly: social connectedness in traditional societies and freedom from physical discomfort in more modern societies.

This article is based on the following publications:

Draper, P. and Buchanan, A. "If you have a Child you have a Life: Demographic and Cultural Perspectives on Fathering in Old Age in !Kung society" (AAA meetings

paper, to appear In *The Father-Child Relationship: Developmental, Symbolic and Evolutionary Perspectives*. Edited by B. Hewlett. NY: Aldine de Gruyter, 1989.

Draper P., and Glascock, A. P. "Can you ask it? Getting answers to questions about age in different cultures." (unpublished manuscript)

Draper, P. and Harpending, H. "Work and Aging in two African societies: !Kung and Herero." In *Occupational Performance in the Elderly*. Edited by B.R. Bonder. F.A. Davis Publishers. (in press)

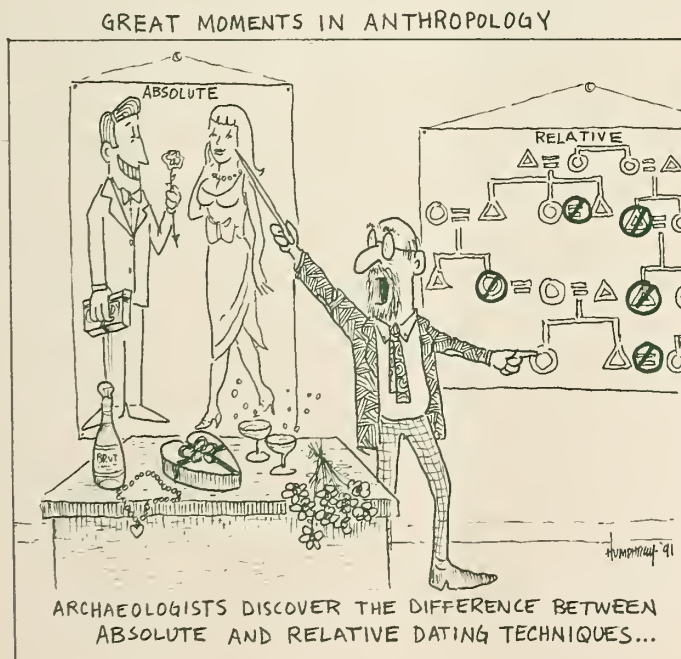
Draper, P. and Keith, J. "Cultural Contexts of Care: Family Caregiving for Elderly in America and Africa." *Journal of Aging Studies*. (accepted for publication)

Fry, C. and Keith, J., eds. *New Methods for Old Age Research: Anthropological Alternatives*. S. Hadley MA: Bergin and Garvey Publishers, 1986.

Sokolovsky, J., ed. *The Cultural Context of Aging: Worldwide Perspectives*. NY: Bergin and Garvey Publishers, 1990.

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HISTORY, PROGRESS AND THE FACTS OF ANCIENT LIFE

How many of us consciously or unconsciously assume that human history is largely a tale of progress through time? Can anyone dispute that the development of modern medicine, sanitation facilities, and almost universal education have brought us today to an era of great benefits for all? If we look far back into human history, did it not all begin with the "Neolithic Revolution," the domestication of plants and animals that ushered in sedentary farming, earliest cities, trade networks, large scale governments and craft specialization. Did not these, in turn, bring humankind to a new level of well-being from which progress could continue steadily up to today?

Most of our elementary, secondary, and college texts still reflect a deep human

belief in the progress wrought by "civilized" life, by the developments growing out of ancient cities. Unfortunately, our sense of human history as steady progress in human well-being does not accord with the actual data at hand. Instead, the facts provide innumerable clues that "civilized" living has been accomplished only at considerable cost to most of the players. We need to revise our thinking, our teaching, and our textbooks to reflect this new research.

RECONSTRUCTING THE PAST

Scientists utilize three main means of reconstructing patterns of health and nutrition in ancient societies. The first method uses small scale groups (hunter gatherers) in the modern world to offer clues about our prehistoric ancestors. The



!Kung San of the Kalahari (sometimes known as the Bushmen) come to mind most readily, but there are dozens of such groups scattered on the various continents (among whom the vaunted "affluent" San actually appear somewhat impoverished).

The second method uses what geologists call "Uniformitarian" reasoning and argues that natural processes--in this case the processes of nutrition and disease--must have operated in the past much as they do today and can therefore be reliably reconstructed. The third and most recently exploited method analyzes the skeletons of prehistoric populations to measure health and disease. Although many skeletons are now being reburied, there were once many thousands available for study. Many prehistoric communities were each represented by several hundred skeletons. There were, for example, 600 representing one Mayan town in my own small college lab--a fairly good sample from which conclusions can be drawn about health and disease in an ancient community.

None of these three methods--looking at modern hunters and gatherers, studying modern disease processes, and analyzing ancient skeletal remains--is wholly satisfactory. Contemporary hunting and gathering populations do live in the modern world, after all, so they are not exact prototypes of prehistoric groups. Disease processes involve living organisms which can evolve; thus they may not adhere as reliably as do rocks to uniformitarian principles. And prehistoric skeletons document only a limited sample of human ills. But the three methods taken together gain strength, often supporting one another in the manner of the legs of a tripod.

In any case, these three types of evidence are the only evidence we have ever had concerning prehistoric health, the only evidence available to Hobbes or Rousseau or any of the more recent philosophers, historians and educators who write the textbooks and the history books we use with our students. Taken together the three types of evidence paint a picture very

different from the one we learned as children, and it is important to correct the erroneous old images of progress still found in many of our "authoritative" texts.

EVIDENCE ON NUTRITION

First, the evidence suggests that the quality of human nutrition, the balance of vitamins, fats, minerals and protein, has generally declined through human history except, of course, for the ruling classes. We talk of 20th century improvements in stature (getting taller) as proof of improving nutrition, yet prehistoric hunting and gathering populations were often as tall if not taller than the populations that replaced them, and the predominant trend in human stature since early prehistory has been downward. (The people of Europe of the 17th and 18th centuries to whom we usually compare ourselves with pride are, in fact, among the shortest people who ever lived.) Eclectic diets of fresh vegetable foods with some meat apparently assure hunting and gathering populations a good vitamin and mineral balance, and, in fact, such groups generally have access to relatively large amounts of meat and protein, rivaling consumption in the affluent United States and exceeding modern Third World averages by a large margin.

Modern hunter gatherers rarely display clinical manifestations of protein deficiency, anemia (iron deficiency), or deficiencies of any other vitamin or mineral even when more "sophisticated" farmers nearby are deficient. To the initial surprise of health teams, infantile and childhood malnutrition, marasmus and kwashiorkor are also quite rare among hunter gatherers. These diseases are more common among share-croppers or other modern populations forced by poverty to rely on a single food such as rice or maize. The most poorly nourished people turn out to be the poor or lower classes of historic and modern "civilized" states from which modern trade systems withhold or actively withdraw various nutrients.

The most common shortage among modern hunter gatherers is one of calories. Paradoxically to any American who has ever gone on a diet, modern hunter gatherers tend to be chronically lean while otherwise well nourished, probably as a result of exercising and eating lean animal products and high-roughage vegetable foods. They get no "free" processed calories. In addition, modern hunter gatherers are making a living in some of the poorest environments on earth, the only environments still left to them after the expansion of modern states.

The skeletons of prehistoric hunter gatherers generally confirm this sense of good nutrition. They commonly show fewer signs of porotic hyperostosis (the skeletal manifestation of anemia) than the skeletons of later populations. Rickets (bending of bones), a disease of vitamin D deficiency reflecting poor diet and/or lack of exposure to sunlight, is primarily a disease of modern cities and is extremely rare either in modern hunter gatherers or in ancient skeletons. Teeth of early archaeological populations display relatively few enamel hypoplasias, the scars of infantile illnesses which are permanently recorded in the teeth.

Whether the reliability of human food supplies has improved with time is one of the most controversial and most important issues in assessing the "march of human progress" through time. There are many anecdotes of hunger or starvation among historic and modern hunter gatherers. However, these typically occur in the arctic or in extreme deserts where more advanced civilizations do not even try to compete, or they occur in contexts where modern states restrict the movement of hunters or limit their activities. Judging by the relative efficiency with which different kinds of wild foods can be obtained, prehistoric hunter gatherers would have been particularly well off when they lived in environments of their own choosing and before large game (one of the richest food sources) was depleted, as appears to have occurred on every continent occupied by

early people. We like to think that modern transportation and storage capabilities have alleviated hunger, and they can; nevertheless, farmed fields may be inherently less stable than naturally selected wild resources. Being mobile may be safer in the face of famine than being sedentary.

Moreover, storage and transportation can fail; governments can and do refuse to help the needy; and in a world of economic specialists and private property, people may be unable to command the price of food even when food is plentiful. We have to remember that any government, the institution which can protect, is double-edged, since it is almost always in some way protecting a privileged class. Modern trade networks inevitably move food (both calories and quality nutrients) away from some populations in favor of others.

The archaeological record of skeletons reflects no steady record of improvement. In fact, if the clues in our teeth are utilized as the measure, one could argue that the frequency of stressful episodes to which the average individual has been exposed generally increases through time in most parts of the world. The historical record of famine in Europe, Russia or China over the past several centuries also suggests no improvement until perhaps the last 150 years--and, of course, people in the Third World are still not protected from starvation.

DISEASES THROUGH TIME

In addition to the decline in the quality of human nutrition, the second point confirmed by all three types of evidence is that the variety and intensity of human infections and infectious diseases have generally increased through human history. Epidemiological theory predicts that diseases will not be transmitted as readily among small groups of people who change their base camp periodically as they are transmitted when people live in large permanent human settlements.

Diseases transmitted directly from person to person in the air or by touch like the flu are most efficient when population density is high and large crowds are gathered (one reason why schools and other similar institutions commonly help disease to spread). Diseases that spread through human feces (including hookworm as well as cholera and most other diarrhea) will obviously be most dangerous for large permanent populations where feces accumulate. Historic outbreaks of cholera in London were traced to instances in which, amid high density population, latrines were able to contaminate wells. The same is true of diseases like bubonic plague, which are carried by rats or other parasites on accumulations of human garbage. And as the experiences of American Indians after Columbus demonstrate, long distance travel and large scale trade spread diseases with devastating effect (it has been estimated that 90% of the Native population was destroyed by disease). The history of bubonic plague in France, decimating large port cities but leaving villages in the interior unharmed, is a good example of the dangers of urban living and conversely the ability of small size and isolated population patterns to provide protection against infectious diseases.

It is, in fact, a fairly commonplace observation that hunting and gathering

bands are relatively infection free and that the rates of many diseases increase when mobile hunters are settled in larger permanent camps. The skeletal record again provides confirmation. Signs of infection in the skeleton become more common as people settle in large-scale cities in essentially every region of the ancient world where the appropriate study has been done. In addition, the low incidence of anemia among ancient hunter gatherers is thought by many scholars to reflect low rates of parasitic infestation as much or more than diet. Tuberculosis, one of the diseases which specifically can be detected in skeletons, is conspicuously absent or quite scarce in the archaeological record until relatively recent times.

Moreover, many "epidemic" diseases appear to require a critical threshold of human population size (either in one place or connected by rapid transport) in order to spread. Measles, mumps, smallpox, influenza, and German measles all appear to need large and rapidly reproducing human populations to survive. The implication is that these diseases did not spread until the recent growth of cities and transportation networks. However, once many Europeans were immunized by constant childhood exposure, these diseases became major vehicles of conquest in the

(continued on p. 14)



THREE METHODS OF RECONSTRUCTING PATTERNS OF HEALTH & NUTRITION

SUMMER FIELDWORK OPPORTUNITIES

Summer can be a time to explore new cultures, both past and present, through research expeditions and field schools. This article provides names of organizations that offer such opportunities, some geared specifically for teachers and students.

SMITHSONIAN PROGRAMS

One opportunity to whet your appetite is Smithsonian Expedition's Crow Fair and Family Reunion at Crow Agency, Montana. Crow Fair, an annual event held in August, is a time when families and friends reunite and solidify relationships through "give-aways." Each day starts off with a parade of men, women, and children in ceremonial dress, followed by inter-tribal dancing and drumming ending late into the night. This summer will be the fourth season of collaboration between the Smithsonian and Little Big Horn College of Crow Agency, whose archives are the recipients of the extensive data collected by dedicated volunteers. The research focus this year is the role of young men in the military service, career choices for Crow youth, and the resurgence of Indian arts, crafts, and customs. Volunteers will gather information from interviews, observation, and participation in the Crow Family Reunion.

The satisfaction volunteers receive in experiencing another culture and in being part of a team can best be expressed in the following quotes:

"I feel real personal growth as a result of this experience. I believe I made a contribution to a better understanding between people of different backgrounds and cultures" (Nancy Crowell, 1990).

"For a brief time I was able to know some of the Crow people as people. This is the greatest gift of the Crow Fair. I do not want to let go of this experience; I want to build on it" (Becky Matthews, 1990).

"It's great being a part of a group of inquiring folks--learning and sharing. So our time spent is multiplied, since we can hear from others about what they have

learned while we've been off doing something else" (Carol Lowe, 1991).

In addition to the Crow Fair and Family Reunion (August 12-18), Smithsonian Research Expeditions is offering another anthropology-related summer project: PaleoIndians and Large Mammals in Saltville, Virginia, (July 12-25 or July 26-August 8, 1992). For further information, write or call Smithsonian Research Expeditions, 490 L'Enfant Plaza, S.W., Suite 4210, Washington, DC 22024; (202) 287-3210.

Office of Elementary and Secondary Education (OESE)

A National Seminar for Teachers titled "Teaching Writing Using Museum and Other Community Resources" will be offered July 7-16 by the Smithsonian Institution for elementary and secondary teachers living more than 75 miles outside Washington, D.C. Teachers may receive graduate credit from the University of Virginia. Applications must be postmarked by March 30. For more information and an application form, write: National Seminars, Office of Elementary and Secondary Education, Arts & Industries Bldg., Room 1163, Smithsonian Institution, Washington, DC 20560; or call (202) 357-3049 or (202) 357-1696 (TDD).

OESE also offers ten week-long seminars with in-service credit for teachers, K-12, from Maryland, the District of Columbia, and Virginia. Practical teaching ideas are given in a variety of interdisciplinary courses in the sciences, arts, and humanities. Three such courses are: Introducing Students to Chinese Art and Culture, Multicultural Education and Pre-school Children, and Psychology in the Classroom. Call Clare Cuddy at (202) 357-2404 for a registration form after May 1.

ORGANIZATIONS TO CONTACT

You may discover within your own community fieldwork opportunities available to you. Anthropology departments at local universities and colleges, state historic preservation offices, and state archeological societies often organize local archeological excavations and frequently accept volunteers with no previous fieldwork experience. The Archaeological Institute of America (AIA) offers a listing

of state archeologists associated with the national organization as part of its yearly field school listing for the U.S. and abroad. The cost, which includes shipping and handling, is \$10.50 for members and \$12.50 for non-members. For each additional copy ordered add 50 cents for shipping. To order, write: Kendall-Hunt Publishing Co., Order Dept., 2460 Kerper Blvd., Dubuque, IA 52001; (800) 338-5578. *Archaeology* magazine, published by the AIA, features an archeology travel guide to sites open to the public in the Old World (March/April issue) and the New World (May/June issue). A field school listing is also available from the American Anthropological Association for \$5.00 for members and \$7.00 for non-members, with a self-addressed envelope with 56 cents postage. Write: AAA, 1703 New Hampshire Ave., N.W., Washington, D.C. 20009 or call (202) 232-8800.

There are several organizations that offer volunteer public participation in worldwide research expeditions in various scientific disciplines. Many of these organizations, listed below are non-profit and participation fees may be treated as tax-deductible contributions.

University Research Expeditions Program
University of California
2223 Fulton, 4th Floor
Berkeley, CA 94720
(415) 642-6586

Earthwatch
680 Mount Auburn St., Box 403,
Watertown, MA 02172.
(617) 926-8200
(Scholarships available for teachers)

International Research Expeditions
140 University Dr.
Menlo Park, CA 94024
(415) 323-4228

Foundation for Field Research
787 South Grade Rd.
Alpine, CA 91901
(619) 445-9264

CEDAM International
(CEDAM stands for Conservation, Education, Diving, Archeology, Museums)
Fox Road

Croton-on-Hudson, NY 10520
(914) 271-5365

SELECTED FIELD SCHOOLS

Study ancient and modern Mexican cultures and visit important archaeology sites with the Meso-American Field Program. Field trip (June 18-July 8) led by *AnthroNotes* illustrator Robert Humphrey and Bernard Mergan. Write Dr. Bernard Mergan, American Studies, George Washington University, P203B, Washington, DC 20052, or call (202) 994-6073.

Picuris Pueblo in the Sangre de Cristo Mountains, New Mexico, is the focus of an ethnographic field school (July 26-August 16) sponsored by Middlesex County College. In addition to three weeks of instruction on the southwest cultures and in field methods, students will live with Pueblo families and participate in village life, including pottery making, adobe construction and feast day. Limited enrollment on a competitive basis. Write: Dr. Diane Z. Wilhelm, Middlesex County College, 155 Mill Road, Box 3050, Edison, NJ 08818-3050; or call (908) 548-6000 ext. 3099.

High school students and teachers are invited to excavate, for one to four weeks, a ceremonial mound at Moundville Archaeological Park, the site of a Mississippian culture (A.D. 1,000 to 1,500). Excavation will take place from June 7-13 and June 28-July 4. Write: Melissa Moon, Museum Expeditions, Alabama Museum of Natural History, Box 870340, Tuscaloosa, AL 35487-0340; or call (205) 348-2040.

Summer Field School in St. Eustatius, Dutch West Indies, is sponsored by The College of William and Mary, June 22-July 31. The main focus will be the excavation of 17th through 19th century Dutch domestic urban sites. Application deadline is April 1. Write: The Reves Center for International Studies, College of William and Mary, P.O. Box 8795, Williamsburg, VA 23187-8795, or call (804) 221-3594; FAX (804) 221-3597.

Crow Canyon Archaeological Center, a non-profit institution specializing in Southwestern archeological research and education, provides programs in archeological field methods, laboratory techniques, and excavation. The Adult Research

Program: Excavation and Environmental Archaeology, consisting of week-long sessions, is conducted from the last week of May through the second week of October. The High School Field School takes place from June 28 to July 25; applications should be mailed in asap. The Teachers' Workshop is scheduled for August 1-9. Transferable academic credit is available for these programs. Archaeological and cultural programs to the Southwest and workshops led by American Indians are also available. Write or call: Crow Canyon Archaeological Center, 23390 County Road K, Cortez, CO 81321; (800) 422-8975, (303) 565-8975.

Archaeology in Israel involves three weeks of excavation at Tel Kerioth and one week of touring. Groups leave May 22 and June 20. Write or call the U.S. Group Coordinator Sheila Sigal, 14149 Garrett Ave., Apple Valley, MN 55124; (612) 432-8098.

Center for American Archeology, Kampsville Archeological Center conducts educational research programs for junior and senior high school students, college students, and the non-professional, and workshops for teachers. This season a stratified site of the Archaic Period located on a flood plain will be the focus of excavation. Scholarships are available for American Indian students. The Center is also participating in a certification program for Illinois avocational archaeologists in concert with the Lewis and Clark Community College. Write: Admissions Office, Kampsville Archeological Center, Kampsville, IL 62053, or call (618) 653-4316.

High school juniors and seniors and college students are also eligible to enroll in the Archeological Field School at Kampsville through the University of Chicago beginning June 14. Write: Dr. Jane Buikstra, Department of Anthropology, The University of Chicago, 1126 E. 59th St., Chicago, IL 60637, or call (312) 702-7150.

Drew in West Africa offers a comprehensive study of West African art and architecture. In Mali (July 4-25), students will be introduced to West African cultures through lectures and travel. In the Cote d'Ivoire (July 23-August 20), students will learn through apprenticeships about West African arts and crafts and archaeology. Write: Office of

Off-Campus Programs, Drew University, Madison, NJ 07940-4036; (201) 408-3438.

The Elden Pueblo Project, administered by the Arizona Natural History Assn. in cooperation with the US Forest Service, is excavating the residential remains of the Sinagua people who occupied the area near Flagstaff, AZ 700-800 years ago. For information, write: Joelle Clark, Elden Pueblo Project, Arizona Natural History Association, P.O. Box 1633, Flagstaff, AZ 86002; or call (602) 523-9642 (messages only).

A field program in Mediterranean Archaeology on Sardinia takes place June 1-July 10. Write: Dr. Gary Webster, Sardinia Project, Penn State University-Mount Alto, Mount Alto, PA 17237; or call (717) 749-3111.

Northwestern University's Ethnographic Field School (June 22-August 15) is an opportunity to learn about the Navajo or Hispanic cultures of New Mexico and Arizona by designing independent research projects. Write or call: Professor Oswald Werner, Department of Anthropology, Northwestern University, Evanston, IL 60208; (708) 491-5402 or (708) 328-4012, evenings.

Historical Archaeology Field School at Historic St. Mary's City, Maryland will focus this season on an unknown brick foundation that may be a 17th century Jesuit school. The ten-week intensive field school takes place from June 10 to August 16. The public is welcome to volunteer throughout the summer, including during the Tidewater Archaeology Weekend (August 1 & 2). Write: Dr. Tim Riordan, Archaeology Program, Department of Research, HSMC, P.O. Box 39, St. Mary's City, MD 20686, or call (301) 862-0974.

Archaeology in Hawaii (June 22-July 21) will focus on excavating three historic mission houses. Write: Michael W. Graves, University of Hawaii, 2424 Maile Way, Honolulu, HI 96822.

La Cienega del Pasado, a Spanish Colonial habitation site dated from ca. 1620 - 1680 and located near Santa Fe, New Mexico, is the focus of the Field School of The Colorado College (May 24-July 3). Write: Dr. Marianne L. Stoller, Chair, Department of Anthropology, The Colorado College, 14

East Cache La Poudre St., Colorado Springs, CO 80903, or call (719) 389-6362.

Quarai Pueblo, occupied from around A.D. 1300 to 1674, is part of Salinas National Monument in central New Mexico. This season (June 1-July 12) uncover information regarding the development of crafts and cotton production through the excavation of middens associated with room blocks. Write: Dr. Kate Spielman, Department of Anthropology, Arizona State University, Tempe, AZ 85287-2402.

Human Origins and Prehistory in Kenya: The Koobi Fora Field School, offered by Harvard University Summer School and the National Museums of Kenya, introduces the wealth of paleoanthropological evidence at Koobi Fora and field methods in early man research (June 7-July 18 or July 23-September 2). Write or call: Dr. Harry V. Merrick, Koobi Fora Field School, Harvard Summer School, 20 Garden St., Cambridge, MA 02138; (203) 481-0674 (Thursday through Sunday) or (617) 495-2921 (Harvard University Summer School Office).

Ancient Greece: History and Archaeology is a cooperative program between the University of Ioannina and Boston University. Students can choose between the lecture tours (June 1-17) and the archaeological field school (June 1-11). Write or call: Boston University, Division of International Programs, 232 Bay State Rd., Boston, MA 02215; (617) 353-9888.

Archaeology in Cyprus offers an opportunity to research the Iron Age (July 6-24) and the Bronze Age (July 27-August 14). Write: Antichita Archaeology Research Teams, Dept. P, P.O.B. 156, St. Catherines, Ontario, L2R 6S4 Canada.

Learn about Australian language, society, culture, and ecology by joining Syracuse University Australia. Write or call: Syracuse University, Division of International Programs Abroad, 119 Euclid Ave., Syracuse, NY 13224; 1-800-235-3472.

Salt Center for Documentary Field Studies will document the tradition and change in Maine among American Indians, fishermen, store keepers, mill workers, farmers, and artisans, June 15-July 7. Write Salt Center for Documentary Field Studies, 19 Pine St.,

P.O. Box 4077, Portland, ME 04101, or call (207) 761-0660.

Archaeology of Britain is offered by the University of Cambridge Summer Studies Program for Adults (July 12-25). Write or call, Office of Cooperating Colleges, 714 Sassafras St., Erie, PA 16501; (814) 456-0757.

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CALL FOR ANTHROPOLOGY SYLLABI

The American Anthropological Association's Task Force for the Teaching of Anthropology seeks syllabi of introductory anthropology courses (physical/medical, archaeology, world cultures/regional courses, cultural, linguistics, and applied). These syllabi can come from kindergarten through college/university curriculum. These materials will be used to analyze what is being taught in our schools and to make them available to teachers who want to learn what others are doing. Send your materials as soon as possible to: Professor Charles Ellenbaum, College of DuPage, Glen Ellyn, IL 60137. For further information, call Chuck at (708) 858-2800, ext. 2511.

NEW PUBLICATION

Archaeology and Education: The Classroom and Beyond, edited by KC Smith and Francis P. McManamon, is a collection of papers from the 1990 annual meeting of the Society for Historical Archaeology. The collection includes an article on anthropology teacher training programs by *Anthro.Notes* editor Ruth Selig; a case study about "Project Origins," an archaeology field program at the Arizona State Museum for people with mental and physical handicaps by Michael Faught and James S. Gittings; and a description of the Museum of Florida History's archaeology programs for youth by KC Smith. To obtain a copy free-of-charge, write to: Publication Specialist, Departmental Consulting Archeologist/Archeological Assistance, National Park Service, P.O. Box 37127, Washington, DC 20013-7127; or call (202) 343-4101; or FAX (202) 523-1547.

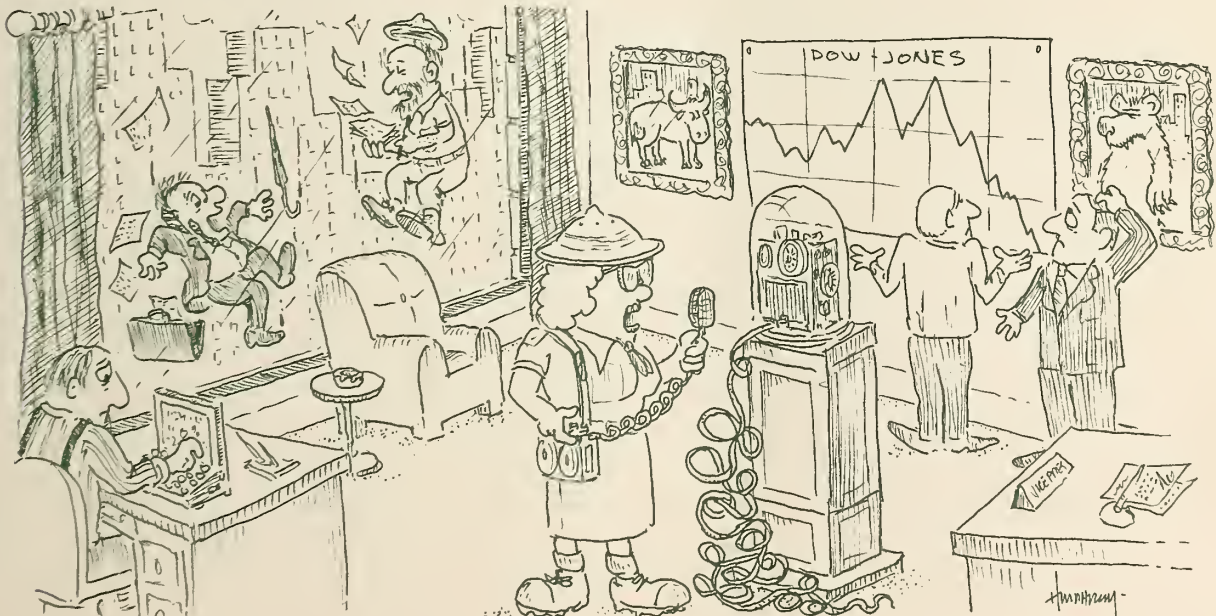
DOING ETHNOGRAPHY AT MACALESTER COLLEGE "FROM THE INSIDE OUT"

Armed with a tape recorder, anthropologist Dave McCurdy spent his sabbatical a few years back doing fieldwork--at a local stockbroker's office. Everyday he visited his informant, watching him "picking up his mail," "checking the Journal," "searching for ideas," "posting his books," "messaging clients," and "making cold calls." McCurdy socialized with his informant and his fellow brokers after work, and on their lunch break played racket ball. He attended "dog and pony shows" and went to "due diligence meetings." In this way, by learning a new language "from the inside out," McCurdy began to learn the intimate culture by which brokers conduct their lives.

Dave McCurdy states the fact simply, "Meeting Jim Spradley changed my life." For several generations of anthropology students, the names Spradley and McCurdy are inseparable, known as joint authors and as creators of an innovative fieldwork approach to teaching anthropology. Few people, however, know the story behind this remarkable collaboration or that Jim Spradley died ten years ago--of leukemia--at the age of 48.

In 1969, Dave McCurdy, the only anthropologist at Macalester, hired a second anthropologist to help him develop an anthropology program for undergraduate students. Thirty-three year old James Spradley had just completed his ethno-

graphic study of Skid Row alcoholics living in Seattle, Washington. For that study, Spradley had adapted a new research technique called "ethnographic semantics," based on a theoretical approach pioneered by Harold C. Conklin, Charles O. Frake, and Ward H. Goodenough. Spradley believed that his methodology, largely dependent on learning the way people categorize, code, define, and describe their experience through language, enabled him to understand and analyze the culture of "tramps." The title of Spradley's highly acclaimed book, *You Owe Yourself a Drunk: An Ethnography of Urban Nomads* (1970), comes from the phrase these men used to describe their feelings after being released from jail. As you learn people's own



language, Spradley believed, you learn their culture from their point of view--"from the inside out."

AMERICAN SUBCULTURES

A brilliant and charismatic teacher, James Spradley urged anthropologists to take the ethnographic study of American culture and subcultures seriously. During the 1960s he came to believe that American urban crises demanded that people in our cities be understood from their point of view--not ours. As he explained in his book, "by defining people as bums, Skid Road alcoholics, vagrants, common drunkards, or homeless men, the average citizen or even the professional knows these men only through the values and language of their own culture--through a popular, medical, sociological, or legal framework" (p. 68).

To develop policies and laws that could help these men, one first had to understand who these men really were and why they lived as they did. Spradley believed that anthropology could contribute vital information to public policy and to practical solutions for social problems, if anthropologists could demonstrate their ability to analyze and describe the culture of others "from the inside out." (In the anthropological lexicon, this analysis of the "culture-bearer's" world from the inside is called "the emic" view as opposed to the outsiders' view that is called "etic.") Anthropologists have long believed that one of their discipline's unique strengths lies in its ability to understand and describe cultures from the emic point of view, and that this view is essential to understanding human cultures worldwide.

ETHNOGRAPHIC SEMANTICS

You Owe Yourself a Drunk is an eloquent, highly detailed ethnographic study of the way tramps organize and identify their life experiences by means of a specialized vocabulary of English, a lexicon that Spradley believed held the key to understanding their culture. Learning this complex language enabled Spradley to

identify five major cultural scenes that tramps find themselves in: buckets (jails); farms (treatment centers); jungles (encampments); skids (Skid Rows); and freights (railroad cars). Within each of these scenes, Spradley identified the various terms that help tramps understand and organize their world: from 15 different kinds of tramps they distinguish among themselves, to one hundred types of sleeping places ("flops") they utilize, to strategies for survival while "making the bucket" (the cycle of getting arrested, pleading guilty, and doing time in jail).

Ethnographic semantics and related methodologies such as componential analysis were developed in the 1960s to apply explicitly "scientific" analytical frameworks to the analysis of cultural phenomena. These techniques sought to determine the definitive attributes of various local terms and cultural concepts in order to get at culturally important distinctions.

Throughout his book, Spradley used ethnographic semantics, identifying the terms tramps used and organizing these terms into chart form in order to create "hierarchical taxonomies." For example, he charted the terms used by the tramps for the people tramps interact with "in the bucket" (jail), the inmates, bulls (people with power), and civilians. Inmates, in turn, include drunks, lockups, and kickouts; bulls include matrons, bailiffs, sergeants, court liaison officers, and others; civilians include cooks, doctors, and nurses.

The organization of these terms into chart form transforms a collection of "folk terms" into a "hierarchical taxonomy," with each group of terms categorized within its proper "domain." Hence, people "in the bucket" are divided into three "domains": inmates, bulls, and civilians. On another and even more complex level, Spradley analyzed the various dimensions or "attributes" that explain the differences among domains. In the above example, the distinction among inmates, bulls, and civilians is the relationship each has to the system (inmates

are held by the system; bulls run the system; and civilians are employed by the system). Such a "componential analysis" results in the creation of "paradigms," a charting of attributes that show exactly how people divide up the various experiences they have. For Spradley's tramps, for example, whether a man travels, how he travels, what kind of home base he maintains, and what livelihood he utilizes turn out to be the four "attributes" by which these men divide themselves up into fifteen different types of tramps. The key role of mobility led Spradley to call tramps "urban nomads"--since that term most closely describes the way these men view themselves.

THE SPRADLEY/MCCURDY TEAM

At Macalester College, Spradley and McCurdy became a team, developing a new approach to teaching anthropology to undergraduate students and co-authoring numerous publications based on their understanding of culture and their approach to doing ethnography. Spradley and McCurdy increasingly came to believe that students could best learn anthropological concepts, perspectives, and even theory by doing fieldwork. The anthropologists' challenge was developing a systematic, focused, and rigorous methodology for students to use within a realistic time frame to complete a fieldwork project. Ethnographic semantics applied to the study of microcultures provided this methodology and structure.

Inseparable as friends, colleagues, and daily racketball partners, Spradley and McCurdy worked together over a period of thirteen years, changing the way anthropology was understood and taught to undergraduates--at least at Macalester. According to former student and anthropologist Marlene Arnold, "we didn't learn theory, we were doing ethnography and discovering theory ourselves. Anthropology students became famous on the Macalester campus because we worked so hard and became so totally involved in the ethnographic studies we were carrying out in the community. Many of the studies by my classmates were

published by Spradley and McCurdy in their book, *The Cultural Experience, Ethnography in Complex Societies*." This volume, first conceived by McCurdy, details the fieldwork approach for students and includes twelve ethnographic reports written by Macalester students. This book is still used in classrooms today.

With standing offers from some of the best universities in the country, Spradley elected to remain at Macalester, where he could work with McCurdy, pioneering their new approach to anthropology and co-authoring publications, including the widely used *Conformity and Conflict: Readings in Cultural Anthropology*, now in its seventh edition. Tragically, Spradley died in 1982, but the Spradley/McCurdy legacy remains vital even today, through McCurdy's popular courses at Macalester and through their joint publications that McCurdy rewrites, updates, and reprints. In all the publications, culture is a central focus.

CULTURE AND ETHNOGRAPHY

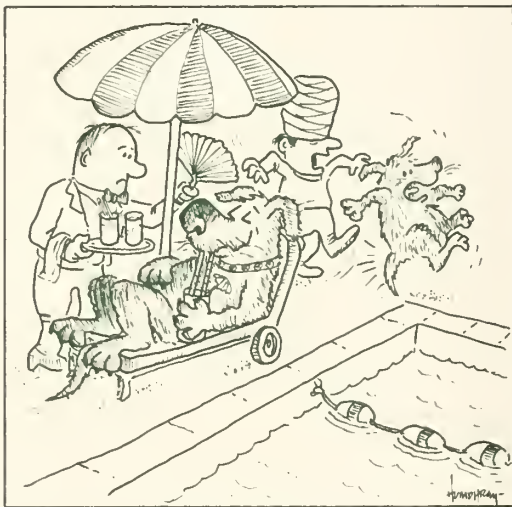
Culture, as defined by Spradley and McCurdy, is not behavior. Culture is a kind of knowledge, "the acquired knowledge that people use to generate behavior and interpret experience." As Spradley and McCurdy explain, as we learn our culture, we acquire a way to interpret our



ANTHROPOLOGISTS DISTINGUISHED FIFTEEN DIFFERENT KINDS OF TRAMPS

experience. One example they cite, based on McCurdy's field experience in village India, is the comparison of the American and Indian conception of dogs.

We Americans learn that dogs are like little people in furry suits. Dogs live in our houses, eat our food, share our beds...villagers in India, on the other hand, view dogs as pests....Quiet days in Indian villages are often punctuated by the yelp of a dog that has been threatened or actually hurt by its master or by a bystander. Clearly, it is not the dogs that are different in these two societies. Rather, it is the meaning that dogs have for people that varies. And such meaning is cultural; it is learned as part of growing up in each group (*Conformity and Conflict*, p. 7).



DOG DOMAINS

CRITIQUES

As Spradley and McCurdy's approach and publications became better known, anthropologists responded to their work, and to the more general question of whether undergraduates can or should do fieldwork, regardless of what methods they used. Many anthropologists use the field approach to teaching anthropology, particularly in courses on methodology. As Ruth Krulfeld of George Washington University explains:

In my methods class, I always have my students do a fieldwork project. They don't usually use ethnographic semantics, but they read Spradley and McCurdy, and they develop a focus and methodology best suited to the project they choose. They can't do the sort of in-depth, sophisticated study a graduate student can do, or an anthropologist who does a two year field study, but, nevertheless, they learn a great deal about culture and about anthropology from their participant-observation study. Through their own projects, many students become so excited about what they are learning that they decide to pursue graduate work in the field.

Sociolinguist and Beloit College anthropologist Lawrence Breitborde explains the appeal of the Spradley/McCurdy approach:

By utilizing a highly structured and precise methodology, Dave McCurdy is able to give his students, even first year college students, a practical and systematic way to get into the field, and to understand culture from the insider's point of view. I admire the precision and the structure, and it's been an influential force in teaching anthropology, spreading to a number of departments across the country.

In the 1970s the early promise of ethnoscience--to provide a scientific basis for ethnography--was never fully realized. Anthropologists could see that language was only one important "window" to another culture, and that ethnographic understanding required several methodologies. Defining groups within the urban underclass as separate cultures or microcultures also was criticized for suggesting that the behavior of these individuals was due to cultural transmission of different values rather than to common reactions to similar pressures of the larger society. (see, e.g. E. Liebow, 1967, *Tally's Corner*, pp. 208-231).

In the 1980s, ethnography itself, and in particular the writing of ethnography, came under serious attack, as revisionists (post-modernists) asserted that an anthropologist's understanding of another culture is so filtered through his or her perceptions, language, and culture, that any description of another culture is suspect. [Because this debate within anthropology has been so divisive and has created a crisis of confidence within the discipline, a future issue of *Anthro.Notes* will review two volumes of essays that illuminate the issue: *Writing Culture: The Poetics and Politics of Ethnography*, edited by James Clifford and George E. Marcus (1986); and *Recapturing Anthropology*, edited by Richard M. Fox (1991).]

Not surprisingly, Spradley and McCurdy's approach to teaching ethnography has caused debate. Some anthropologists assert that unsophisticated undergraduates cannot do ethnography because they know so little anthropology, and, in particular, know so little theory; that practical considerations rule out the approach for most departments and most professors; and that student ethnographers, in fact, will make mistakes and run the risk of engaging in unethical behavior, such as not protecting informants, or trying to study illegal activities, such as groups involved with drugs or alcohol.

MCCURDY RESPONDS

At the 1990 American Anthropological Association meetings, McCurdy described his approach to student ethnography and answered these criticisms. To those anthropologists who assert that undergraduates are not trained to do fieldwork and need to learn theory first, McCurdy pointed out that an overall grasp of theory can, in fact, be important to providing structure, definition, and focus to field research. There are, however, other ways for students to focus their research. By beginning to collect and analyze data using one highly structured technique, the student can come to understand the theoretical basis of that technique and its

limitations, and can also develop hypotheses and interpretations based on the analysis.

McCurdy gave several examples to support his assertion that students can arrive at theoretical hypotheses through their own research. One student, for example, studied paramedics working on ambulance teams. The student discovered that these paramedics used three separate languages to convey the same information, depending on who received the message: a radio language, a technical-medical language, and a slang language. The student hypothesized that slang (for example, "crispy critter" denoting a badly burned patient) developed for functional purposes, easing the terrible emotional stress paramedics endured while caring for seriously injured and often mutilated human beings.

McCurdy offered several suggestions to ease the practical problems of teaching field research to students, although admitting that this is a problem with large classes of undergraduates. He suggested assigning limited problems for students to research in short papers (for example, ask students to report on the ways people celebrate birthdays); lecturing on field methods and using hand-outs; having graduate students or section leaders handle student discussion of their projects as they develop; or running a seminar in interviewing and field research or a summer field school.

Regarding ethical problems, McCurdy was emphatic. Students must learn from the beginning that informants need to be protected. Student researchers must explain to their informants and anyone they come into contact with who they are and what they are doing. No student can study any illegal activity. All students must read the AAA Statement of Ethical Principles and Responsibilities, and informants' privacy must always be the paramount consideration. Ethical risks exist, McCurdy stated, but they exist for all ethnographers, no matter how well trained or sensitive they are. McCurdy summed up his response:

I have argued that ethnographic research is a central and unique property of cultural anthropology. Ethnography can be undertaken by undergraduate students without theoretical training; it may actually be a useful way to bring students to theory. Although teaching ethnography may place a strain on faculty time, adaptive measures make it practical even for fairly large classes. Similarly, ethnography always entails ethical risk, but such risk may be reduced by openly facing ethical consequences.

Recently, McCurdy was asked to comment on his career at Macalester:

When I take stock of Macalester's anthropology program these days, I can't help but be pleased by its progress. The faculty has doubled in the last 20 years; it attracts a larger number of undergraduate majors than at many large universities. It has ranked first in the number of students per faculty member for five of the last twenty years, and it has never ranked lower than fifth. A significant number of our students go on to graduate school, and scores of them claim the value of anthropology in their lives. Although one can never be sure, I like to think that ethnography had something to do with it.

BOOKS CO-AUTHORED BY JAMES P. SPRADLEY AND DAVID W. MCCURDY

Conformity and Conflict: Readings in Cultural Anthropology, 7th ed. Scott Foresman/Little Brown, 1990. (First edition published in 1971.)

Instructor's Manual: Conformity and Conflict: Readings in Cultural Anthropology, 7th ed. Scott Foresman/Little Brown, 1990. (First published in 1975.)

Anthropology: The Cultural Perspective. 2nd ed. reissued by Waveland Press, 1989. (This edition first published in 1980.)

The Cultural Experience: Ethnography in Complex Societies. Waveland Press, 1988. (First published in 1972.)

BOOKS BY JAMES P. SPRADLEY

You Owe Yourself a Drunk: An Ethnography of Urban Nomads. Lanham, MD: University Press of America, 1988. (Originally published in 1971.)

Participant Observation. Holt, Rinehart, and Winston, 1980.

The Ethnographic Interview. Holt, Rinehart, and Winston, 1979.

Ruth O. Selig

(In a future issue of *AnthroNotes*, a Teacher's Corner by David McCurdy will further describe the Spradley/McCurdy approach to teaching ethnography using ethnographic semantics.)

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("HISTORY, PROGRESS, AND THE FACTS OF ANCIENT LIFE" continued from p. 4)

spread of European hegemony. These diseases not only killed many Indians but also appeared to provide evidence that Europeans were divinely favored.

Many other diseases that plague modern populations are also rare or absent in modern hunter gatherers. High blood pressure is generally not found in hunter gatherers regardless of age, "racial type," or location. Diets naturally low in sodium may be one good reason; another may be the lack of fatty build-up in blood vessels that contributes to widespread high blood pressure, strokes and heart attacks.

Diabetes also generally does not occur among hunter gatherers, although the same individuals may be prone to diabetes when fed a "modern" diet. Bowel and breast cancer are also relatively rare in populations who do not live a "modern" lifestyle. While this is sometimes attributed to a lower life expectancy, in fact, the proportion of adults who are over age sixty in hunting and gathering societies can be comparable to that of our own (see "Anthropological Perspectives on Aging," by Brooks and Draper, *Anthro. Notes*, Fall, 1991).

LIFE EXPECTANCY

Trying to reconstruct the history of human life expectancy is difficult. Life expectancy, the number of years an individual can expect to live, refers to a rough average of age at death in a population, not to how long the oldest individuals live. (A group will have a life expectancy of 40 if half the group lives to 80 and half the group dies at birth). We can observe modern hunter gatherers and measure their individual lifespans, but the deaths we observe mostly result from causes that would not have been part of ancient life, like a tuberculosis epidemic. Most observed deaths are from infectious diseases and most of those from diseases we consider modern. We can determine the ages of skeletal populations, but they may not be complete. Moreover, while children can be aged relatively easily from their teeth and unfused bones, aging adults is difficult and full of controversy. Nevertheless, the combined data suggest life expectancy of about 25 years at birth for our early ancestors, a poor figure but one which again compares favorably to figures from much of urban Europe as late as the 18th or 19th century, and from India well into the 20th.

In particular, hunters and gatherers seem to have been relatively successful in rearing their young. A survey of all of the known modern hunter gatherer populations suggests that they lose an average of 20% of their children as infants and about 45% before adulthood, figures which accord

reasonably well with the evidence of ancient skeletons. These figures, terrible as they are, compare favorably with most of Europe prior to about 1850 and with many major American cities as late as the turn of the last century.

CONCLUSION

The point of all this is that our models of history--the models which consciously or unconsciously shape our planning for the future--are misleading, based too much on the experience of the privileged classes which mistake their privilege for progress. In the 17th century, Hobbes characterized primitive life as "nasty, brutish, and short" at a time when life for most of his own compatriots was apparently shorter and was certainly nastier, at least for all those outside the ruling classes.

We do not simply progress. Many aspects of so-called "civilizations"--the adoption of sedentary farming, cities, trade, social class distinctions--are mixed blessings for the participants. It is better to see history as simple population growth and the endless competition between ever larger political units in which some societies lose and some societies win without necessarily generating benefits for all of their citizens.

It is particularly important to be aware of our own biases and our often unconscious desire to believe in progress as well as our tendency to forget the larger frames of reference through which human history develops. The facts of ancient human life can not only inform the understanding of our past, but also help us plan more carefully for the future.

Mark N. Cohen
Department of Anthropology
SUNY/Plattsburgh

*This article is adapted from Mark N. Cohen, *Health and the Rise of Civilization*, Yale University Press (1989) that provides detailed documentation and an extensive bibliography. The paperback edition can be found or ordered through most bookstores.

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Anthro Notes

National Museum of Natural History Bulletin for Teachers

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WHO GOT TO AMERICA FIRST? A VERY OLD QUESTION

As most of us are now very aware, 1992 is the 500th anniversary of Christopher Columbus' famous voyage to the "New World." The assertion that Columbus "discovered" America when his trio of ships made a landfall in the Bahamas has been questioned, however, by a number of concerned individuals. Native Americans are understandably disturbed that their priority of being the "first" Americans is somehow challenged. Most scholars now insist that the first human settlers of this continent were indeed the ancestors of the contemporary Indian tribes. Their first migration (from Asia via the Bering Strait area) probably occurred more than 15,000 years ago, with several more waves of migrants arriving some thousands of years later.

But if that is the widely-held explanation, what is all the argument about? Most of the

debate surrounds hypothetical later arrivals in the New World, especially during the last 3000 years, and purportedly mainly from locations to the east across the Atlantic. A smaller number of proponents look to trans-Pacific connections during this same period of time. What sort of evidence and how we evaluate it is the subject of concern for many anthropological scholars today. As our review will indicate, these are not new questions, nor are they ones that can be settled for "all time"--the same ones keep reappearing over the centuries.

The century following Columbus' well-documented voyages, none of which actually reached North America, was one of questioning too. Had Columbus reached Asia or the West Indies? Who were these inhabitants that met him as he stepped ashore? We still refer to them as "Indians" because of the mistaken view that the islands, and later the



" AT THIS RATE IT'LL PROBABLY TAKE THEM 500 YEARS TO SORT IT OUT..."

mainland, were part of the Asian continent, not a "New World" at all. Magellan's circumnavigation of the world in the 1520s would establish the Western Hemisphere as a separate land mass, but then the question arose as to the origin of the inhabitants.

Here speculations ran wild. By the end of the century (1590) a Spanish church scholar, Joseph de Acosta, would publish a marvelously well-constructed answer: the inhabitants of the New World came from Asia across a land bridge, arriving as hunters, then developing agriculture and later high civilizations such as he had seen in Peru and Mexico. He specifically discounted possible trans-Atlantic connections to the Lost Tribes of Israel or the mythical sunken continent of Atlantis.

Modern scholars would agree with this Acosta scenario, but just about a decade later another Spanish cleric, Gregorio Garcia, wrote a two-volume work that would open the gates of migration to the Lost Tribes, to refugees from Atlantis, to Carthaginians from North Africa, and many more. He refused to be partial to any on his long list, but they were almost all Trans-Atlanteans, bringing seeds of civilization with them. Thus in 1607 the battle was joined: the New World native cultures were either derived from land-based Asian migrants (Acosta) or transplanted from the Old World by trans-Atlantic seafarers (Garcia). The argument has lasted until today.

METHODS OF INQUIRY

The origin of the earth's inhabitants is a central question in anthropology. The answer is also one that requires careful evaluation of all the information available to us each time the question is asked. Acosta and Garcia were limited in the facts they had at hand, although both had lived in several parts of the New World before addressing the problem--no armchair scholars here. But what kind of evidence do anthropologists bring to bear on such questions today?

First, we look at the people themselves: what do they look like, whom do they resemble? Simple questions in the 1600s: outward appearances were all they had. Now in Biological Anthropology, we turn to sophisticated analysis of genetics and DNA to try to see way back in time as human

populations spread across the globe. We can clearly tie all basic Native American origins back to Asia, although we may quibble about exactly at what time and with which Asian groups they are genetically most closely linked.

Second, we consider the cultures of the Native Americans, especially those aspects of culture that will allow a long look back in time. In this case, linguistics, the study of languages, is an important information source. Native American languages represent enormous diversity, much more so than in comparable areas in the Old World, where diversity has decreased over time. This pattern of diversity suggests both internal diversification and repeated migrations from North Asia. According to one scholar, the degree of linguistic diversity in the New World points to a history of "tens of millennia."

Third, when we look at the artifactual content of New World cultures, we conclude that most of these myriad artifacts, covering thousands of years, are definitely of New World origin, although certain aspects of some material cultures do show north Asian connections, especially in the Paleo-Indian period, 7-10,000 years ago.

Finally, we turn to a rather different category, that of the plants and animals associated with New World cultures. Here too just a few specific Asian connections exist: dogs are clearly long-time associates of humankind and quite surely accompanied some of the very first Americans from Siberia. Plants are quite another matter, and here we are discussing agricultural items only. All the major food plants, such as corn, potatoes, and beans, are derived with the help of human intervention from native American domesticated plants. Only a few questionable items await further study concerning a possible outside origin; these are the bottle gourd and cotton. The sweet potato, another enigma, seems to have gone from South America to Polynesia, just to confuse the issue.

With those basics in place, we can enter the fray of evaluating other sources of evidence for trans-oceanic connections with one certain understanding: if an hypothesis is bolstered by strong emotional concerns, almost everything can and will be believable to some supporters. Recognizing that each of us has a personal bias that influences our

own view of the world does not make us immune to its force, but at least we can make a conscious attempt to make our evaluations as bias-free as possible.

MOUNDBUILDERS

Archaeological evidence to answer the question of "Who Got Here First?" would necessarily have to await the development of the discipline of archaeology in North America. Thomas Jefferson is very often cited as the "father" of American archaeology, and he certainly attempted one of the first archaeological explanations of the question when he wrote in his famous "Notes on Virginia" (1787) about an Indian Mound that he had excavated some years before. However, his strongest evidence to support his belief in an Asian origin (via the Bering Strait) of the Native Americans was from his study of Indian languages. He cited the diversity of these languages as proof that they had been here a long time.

Other scholars joined Jefferson in this well thought-out view. Yet, in the early nineteenth century the westward expansion of settlement into the Ohio Valley produced a great deal more archaeological evidence from Indian Mounds. As interpreted by some new voices, the accumulating data supported the supposition that these mounds and the rather elaborate artifacts found in them were made by the exotic "Mound-builders," purportedly an advanced and extinct culture not connected to Native Peoples. The hypothesis spawned some very popular books, such as those by Josiah Priest (1833), that were fanciful in their interpretations and careless in their evaluation of the data.

The voice of reason came from Samuel Haven in a Smithsonian-sponsored volume (1856) that supported the Bering Strait hypothesis and called some of the wilder notions "Vagaries." We now know that much of the Moundbuilder hypothesis was based on fraudulent documents, such as the Grave Creek and Davenport inscriptions, which tried to give support for literate Trans-Atlantic cultures making inroads on the prehistory of the Ohio and Mississippi Valleys. It just wasn't so, and again thanks to the Smithsonian's major research project of Mound Exploration under John W. Powell, the Moundbuilder Myth was laid to rest by 1900. The mounds, the earthworks, and the artifacts were the handiwork of

American Indians, not that of Trans-Atlantic invaders.

VIKINGS IN AMERICA

However, there was much more than just mounds and Native Americans to argue about. By 1891 a volume entitled "America Not Discovered by Columbus" by Rasmus B. Anderson would contain a lengthy bibliography with some 350 sources on the topic. It listed claims of America's discovery by Chinese, Arabs, Welsh, Venetians, Portuguese, and Poles. However, the majority of these references supported the notion of Vikings as the ones who got here first in the race across the Atlantic. This hypothesis came into being more than 150 years ago, and really had only the literary evidence from the Norse Sagas to support the idea.

Not that it was not a worthwhile idea. Few doubted that Vikings in North America could or did happen. There just was no archaeological evidence to prove it. Again frauds came to the rescue; if you can't discover the data you need, just manufacture it! Thus was born the fake Kensington Rune Stone in the 1890s and the "salting" of the Beardmore site in Canada with real Norse artifacts to be used to support a pre-Columbian Norse presence in North America. But good archaeology by Helge Ingstad would finally come to the fore in 1960 with the right answer: Norse ruins at L'Anse Aux Meadows on the northern tip of Newfoundland, complete with sod huts and artifacts such as a brass pin, a soapstone spindle whorl and iron nails, all dated to about AD 1000. Was it the home of Leif Erickson? Archaeologists are not sure, but we know that the Vikings certainly made it to the New World long before Columbus.

OTHER SOURCES OF NEW WORLD INFLUENCES

With an affirmative reply to the Viking presence, one might think that much else might logically follow. What about Chinese voyagers in junks across the Pacific, Lost Tribes from Israel still looking for a homeland, Phoenicians from the Mediterranean, Celts from Ireland or Wales, or West Africans in Mexico? Well, all of the above and more have been suggested by various writers in the twentieth century alone. Some of the best known authors

among recent long-range diffusionists are Harold Gladwin, Barry Fell, and Ivan Van Sertima.

First, let us consider whether or not such voyages were possible during the last 3000 years. The answer is a very strong yes. The maritime exploits of the Polynesians during this period are well-known and documented by excellent archaeology in the Pacific. They colonized the entire eastern Pacific area. Much earlier (50,000 years ago) migrants from Southeast Asia made their way to the great island continent of New Guinea/Australia; part of that trek quite probably included water crossings.

Some of the proposed trans-Atlantic crossings were supposedly made by cultures known to have had maritime skills. Indeed the fact that Atlantic crossings (especially in summer) in small boats, even in solo attempts, have been successfully made is well-known. The Pacific, too, has been conquered in recent times, but with a fair number of casualties, although the latter fact is not as well advertised. So we may accept that it can and could have been done with the maritime expertise available from 1000 B.C. on, although the modern successes have benefitted from navigational and safety aids not available to all would-be travelers in earlier times.

But what is the basic evidence for this multitude of ocean-crossings to the New World that some chroniclers now insist took place in the past? There is certainly no biological evidence that can be used to support any such trips. One would have to admit that additions to the New World gene pool by these shiploads of mariners might be hard to detect; modern studies of prehistoric human skeletal remains in the New World have not shown any identifiable evidence, either, to support the presence of such overseas visitors.

Save for the Norse finds discussed above, no important archaeological discoveries have been made, if one means intrusive sites with buildings, artifacts, and trash heaps attributable to such voyagers. The evidence that has been used to support these hyper-diffusionist claims falls into two major categories: 1) inscriptions found either on cliffs, on rocks, or artifacts, or on crude stone structures where no other pertinent artifacts are found (ex. Dighton Rock in Massachusetts), and 2) stone sculptures and

other figurative pieces of art that are thought to depict foreign visitors or to resemble the artistic work of non-New World cultures such as the colossal Olmec head discussed in Professor Grove's article in this issue.

The inscriptions in a wide variety of purported Old World scripts have been found from one coast to the other, in the Rocky Mountains to the suburbs of Tucson, Arizona, from the Maine coast to the Great Basin of Nevada and Utah. Many of the inscriptions contain mixed texts with symbols of different times and origins. These finds also share another unusual characteristic; none have produced any nearby artifacts or associated living areas. They stand alone as sentinels of the past with no archaeological context--a very strange situation. Who left them? How did the ancient voyagers travel so far without leaving a single trace other than these inscriptions? Why did they do it? Unanswered questions and important to consider. One set of inscriptions with accompanying artifacts are the Michigan Relics or Soper Frauds manufactured by James A. Scotford between 1890 and 1920. Although debunked for decades, these pseudo-cuneiform messages are still being deciphered today.

The study of stone and ceramic sculptures to prove foreign connections has flourished in Mesoamerica, the area of high culture in Central America. Here these works of art are thought to demonstrate bearded voyagers from abroad, and in the case of the great stone heads from Vera Cruz, Mexico (some are eight to ten feet in diameter), they are thought to confirm trans-Atlantic travel from Africa to Mesoamerica and the Olmec at approximately 700 B.C. This African origins hypothesis has been supported for several decades by Prof. Ivan Van Sertima of Rutgers University, and is, in my opinion, based on a mixture of ethnic pride and personal bias. The facial features of these heads in particular were thought to represent Africans, however, they are also similar to the features of many Native Americans from the Olmec area. Any resemblance between the peoples of West Africa and Mesoamerica is more likely due to common adaptation to tropical conditions than a closely shared ancestry.

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TEACHER'S CORNER: TEACHING ETHNOGRAPHIC INTERVIEWING

Ethnographic Interviewing has been taught as a regular semester-long course at Macalester College for the past 22 years. The course is designed to enable students with little or no anthropological background to "enter the field" and successfully elicit cultural data from members of an American microculture. Although the course stresses interviewing as a field technique, standard and participant observation can be part of the ethnographic process. The purpose of the course is to enhance student understanding of what culture is and how it functions for members of a group, as well as to acquaint students with a valuable qualitative field method. Classes are largely devoted to problem solving, rather than lecturing or discussions of reading.

CULTURE AND ETHNOGRAPHY

When students begin the ethnographic interviewing course, I give them a detailed syllabus describing course goals and a sequence of research tasks. The first task is for students to read about the concept of culture and its place in ethnographic research. I use a so-called "cognitive" definition of culture (one that sees culture as a form of knowledge) for this course because I think it gives a clearer idea of what students should look for when they interview. I define culture as *the learned knowledge that members of a group use to generate behavior and interpret experience*. This definition stresses that culture is knowledge, not behavior or material goods. It argues that culture is learned and not inherited genetically. It says culture is shared by members of a group; it is not knowledge unique to an individual. Although culture is knowledge, not behavior, it is intimately tied to action. The definition asserts that group members use culture to generate behavior because culture provides a framework of rules to guide appropriate activity. Similarly, culture permits members of groups to interpret their surroundings and the actions of others. It provides the categories, rules, and plans by which group members conduct their lives.

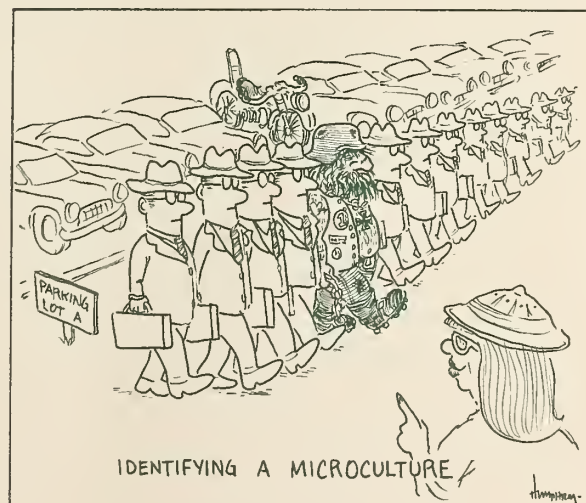
Ethnography is the task of discovering and describing a culture. Ethnographers try to learn about the behavior of a group by

looking at it through the eyes of the members themselves. Instead of going to the field with predefined problems, hypotheses and questions as many social scientists do, ethnographers try to elicit an understanding of what is going on from the actors themselves. They try to avoid projecting their own cultural categories or interpretations onto the world of their informants. They play the part of students; cultural informants become teachers.

Ethnographic Interviewing uses a focused ethnographic approach called ethno-science to involve students in a series of clearly defined learning steps. These steps require students first to identify a microculture, then choose a cultural informant, conduct a series of interviews, ask three kinds of ethnographic questions, record and analyze ethnographic data, discover cultural themes, and finally write an ethnographic report. Although each student investigates a different microculture, teaching the ethnographic method one step at a time means that all students will encounter at least some of the same fieldwork problems at the same time. What follows is a discussion of these steps.

CHOOSING A MICROCULTURE

To conduct ethnography, students must find a particular culture to study; choosing a culture depends on the ability to spot culture-bearing groups. Since Macalester courses only last for three and one-half months, I ask my students to study the culture of smaller groups called microcultures because they are more



manageable for the amount of time. Cultures come in different sizes, and some are found inside others. For example, citizens of the United States share a **national culture**, the cultural knowledge that sets them off as Americans. Americans may also be part of a major ethnic subgroup, such as African Americans or Mexican Americans. We often call these **subcultures**. There are, however, many other, smaller groups found inside the larger ones that members participate in only part of the time. I call these **microcultures** and make them the focus of the ethnography course because they are common, interesting and easy to access. Occupational groups, such as a group of bank tellers, can be called microcultures. So can recreational groups, such as a local chapter of a motorcycle riding association; educational groups, such as the third graders at a nearby school; kinship groups, such as nuclear or extended families; or political action groups, such as a local chapter of the Sierra Club. Macalester students have studied the cultures of hairdressers, bouncers, midwives, real estate agents, buckskinners (people who come together to create life as it was in the 1840s frontier), emergency room doctors, homeless shelter residents, sound technicians, musicians, airline pilots, camp counselors, zoo keepers, car salesmen, custodians, and hundreds more.

I warn students to keep several things in mind as they choose microcultures because some are easier to study than others. It is easier to study enduring, clearly structured microcultures because informants recall them more clearly. It is wise to avoid microcultures associated with public relations or ideologies such as religion, because informants will give a "party line" rather than good "inside cultural" information. Since informants remember better what they are doing at the moment, it is easier to study currently operating microcultures. Since the ethnoscience interviewing method depends on discovering the inside language of informants, it is better to study social microcultures, which promote regular conversation, and ones characterized by the use of English. It is harder to study "up" than "down" when you do ethnography; bank presidents are more guarded than bank tellers. Artistic cultures are difficult to interview because so much of the culture of art and music is tacit and "felt." I also suggest that students look at microcultures they know little about because

they will find it easier to spot unfamiliar cultural elements. Finally, I urge students to stay away from microcultures they are already a part of because it is often difficult for them to switch roles from group member to outside interviewer.

Most of my students choose a microculture and then look for an informant. An informant is someone who belongs to a particular culture and willingly teaches the anthropologist about that culture. Informants can make or break the research experience. It is wise to find an informant who is verbal, available, knowledgeable about his or her microculture, and interested in being interviewed.

I usually limit students to a single informant each semester because they lack the time to establish rapport with more than one. Students recruit informants from the community surrounding the college or may even find other students or family members to interview. Often they approach an informant "cold turkey." For example, last semester a student who wished to know about tattooist culture simply went into the tattoo parlor and asked the tattooist if she would be willing to engage in a series of interviews. Many students find informants by enlisting the aid of a go-between. One student found a zoo keeper through a friend who knew one. Still other students approach research by thinking of someone who would make a good informant, then asking that person what microculture they know about.

ETHICS AND BEGINNING THE STUDY

When students begin their ethnography, they have to be open about what they intend to do, and they have to recognize their own ethical responsibilities. I require students to tell informants that they are Macalester students doing a research project in an anthropology class. I also have them read the statement on ethics published by the American Anthropological Association. I stress the importance of protecting the informant at all costs. This often means covering the real identity of people and places and refraining from inquiry into damaging subjects. Finally, I will not permit students to study illegal microcultures, although many find them interesting. The risks to the students themselves are much too great.

RESEARCH STEPS

The interviewing process is divided into three steps: discovering folk categories, eliciting taxonomic structure, and finding attributional meaning [see "Doing Ethnography at Macalester College" in the Winter 1992 issue of *Anthro.Notes*]. These steps relate to the central thesis of ethnoscience that a significant part of people's culture is coded in language. If you can learn the words people use, place closely related words in taxonomies and determine their meaning, you can gather a great deal about a culture quickly and systematically. Let's look at these steps one at a time.

Discovering categories. I teach my students that human cultural knowledge is stored in thousands of mental categories. For example, *grass* is the name for a category of plant growing in front of my house. Although each little plant is slightly different, I and my neighbors can efficiently talk about the plants by categorizing them as a single kind of thing. We call the words used to name categories folk terms.

The first step in the interviewing process is to discover folk terms. To do this, students ask a kind of ethnographic question. **Descriptive questions** are any questions designed to get informants talking about their cultural worlds using their own folk terms. Since ethnographers try to elicit the informant's viewpoint, descriptive questions try not to lead. To elicit folk terms, the best strategy is to ask about what people do, not what they think or what their opinions are.

The most general descriptive question and one which students ask first is the **grand tour question**. This asks about an informant's average day or about the layout of a particular place. For example, when asked what he did from the time he arrived at work until he left, a stock broker described arriving at the "office," stopping by the "cage" to pick up his mail, reading his "writes" and "confirms," "posting his books," reading the "*Journal*," and "calling clients." All these are folk terms for stock broker categories.

Once the initial grand tour is completed, student ethnographers ask **minitour questions**, which are questions about some of the folk terms they learned from the

grand tour question. "Could you describe what brokers do when they call clients?" would be a minitour question. So would, "Could you describe the cage for me?" Informants then go into more detail about these things, using additional and often more precise folk terms.

Story questions and native language questions are also kinds of descriptive questions. "Has anything unusual happened to you or other brokers recently?" would be an example of a story question. Stories often yield a wealth of folk terms. Native language questions are used to check whether or not a particular word is really a folk term, one used by members of the culture. "If you were talking to another broker, would you refer to that place as the cage?" would be an example of such a question.

I have students tape record interviews and transcribe them completely, so they don't miss folk terms. After they have completed their first interview, I have them make an overhead transparency of the first page of their interview and show it to the class. They discuss with their classmates how their interview went and ask for help with problems. This gives students a feel for different interviewing and informant styles, and a sense of involvement in each other's work.

Discovering Taxonomic Order. The next step in the research process is to discover taxonomic structure for folk terms. The task derives from the fact that some folk categories classify other categories by a single relationship. We call the larger categories **domains**. For example, at the brokerage office, the domain "broker" is a cover term for "big hitters," "rookies," "brokers" (average brokers), and the "manager." Together these terms form a small taxonomy, which is a hierarchical chart based on the inclusion of some terms by others and on the notion that terms on any level contrast with each other. One student, Sharon Saydah, recently elicited the a taxonomy of kinds of customers from a car salesman. Customers or buyers could be divided into 14 categories including mom and pop (empty nestors), engineer (pipe smokers), parents with high school grad, guys wearing Raiders jackets (gang members), outstaters (weekenders), brochure collectors, and first time buyers. To create taxonomies, students must look for domain

cover terms. Plural nouns often give clues as the term *customers* indicates above and the relationship "kinds of" implies. I also have my students look for taxonomies built on other relationships in addition to "kinds of"; for example, "ways to" do things, "steps in" doing things, or "parts of" things.

To fill out taxonomies, I have students use taxonomic or structural questions. If they already have discovered a domain and a relationship, they can ask **descending structural questions**. For example, once she discovered the term "customers," Sharon Saydah asked "What kinds of customers are there?" which is a typical descending structural question. If students discover a list of things that all appear to be related in the same way, they can ask an **ascending structural question** to discover the domain that ties them together, such as "What do all these terms have in common?"

After a second and third interview, using a mixture of descriptive and structural questions, I have students construct a taxonomy to show to the class. Since it is easy to include information in a taxonomy that does not belong, discussion about taxonomic problems can take substantial time.

Discovering Attributional Meaning. So far, all that students may know about some of the terms they have collected is what they sound like and how they relate to other terms in a taxonomy. The final interview step involves discovering more about what terms mean by finding out the important attributes that relate to them and that help distinguish between the terms. For example, one student found from a touring motorcycle club member that a 1991 *Interstate* is a kind of Honda Gold Wing motorcycle (its place in a taxonomy) that has an opposed six cylinder engine, is water cooled and shaft driven, is very smooth, is very heavy, has a comfortable seat, has a radio but no cruise control or CB, is very reliable, handles well, and has large luggage capacity. All of these are important attributes that give the *Interstate* meaning in the culture of touring club members.

I tell my students that it is easier to elicit detailed attributes of terms if you have informants compare and contrast a set of closely related categories, and this is where taxonomies come in. I have my students take a "contrast set" of categories from a

taxonomy, then ask attribute questions about them to elicit dimensions of contrast. Questions might ask informants the difference between two terms, or to take three terms and point out which two are most alike and how they differ from the third. Another good attribute question asks informants which categories are best and why. The "why" question should yield sets of important attributes.

When they are done, students display their attributes and original contrast set in paradigms, which are charts designed for this purpose. A paradigm of the contrast set, "kinds of securities," elicited from a stock broker, would look like this.

Paradigm of Kinds of Securities

<u>Kinds of Securities</u>	<u>Safety</u>	<u>Return</u>	<u>Capital Gain</u>	<u>Insured</u>
bonds	high	medium	sometimes	no
stocks	lower	low	yes	no
CDs	v.high	medium	no	yes

In this paradigm, the original contrast set is the three kinds of securities (bonds, stocks, and CDs); the dimensions of contrast are "safety," "return," "capital gain," and "insurance"; the actual attributes for each kind of security (high, low, medium, etc.) are listed in the chart.

WRITING THE PAPER

Once students have completed the various research steps, I ask them to continue interviewing, using all the kinds of ethnographic questions as they apply. They continue to record interviews and build their data base. Toward the end of the semester, I have each student look for the problems or adaptive challenges that his or her particular culture seems designed to handle. For example, the railroad switchman culture studied by one student seemed largely organized to manage the problem of managing time and relations to an uncaring employer. Stock broker culture seemed to adapt brokers to the need to buy and sell stock for valued clients in an uncertain market better suited to long-term holding. Again, I ask students to make lists of "cultural problems" and share these with

(continued on p.14)

UPDATING OLMEC PREHISTORY

The hot and humid lowland tropical forests of Mexico's southern Gulf coast seem an unlikely environment to nurture early steps to civilization. However, from about 1150 to 500 BC that region's riverine floodplains and adjacent low uplands were the domain of the Olmecs, whose magnificent stone monuments and ancient ruins lay hidden for centuries beneath jungle vegetation. Eight years of research, initiated in 1938 by Smithsonian archaeologist Matthew Stirling, uncovered fabulous Olmec stone carvings, jade objects, and mound architecture. Coming from a region commonly thought inhospitable and marginal, the finds perplexed scholars. More perplexing was the great antiquity Stirling assigned to his discoveries. The sophistication of the Olmecs seemed out of place in both time and space. While their apparent precocity soon led scholars to perceive them as Mesoamerica's first civilization and "mother culture" to all of its later civilizations, the origins of their complexity, and of the Olmecs themselves, seemed puzzling.

Today, a half century later, access roads crisscross much of the area, and most of the tropical forest vegetation has been removed for cattle ranching, sugarcane production, and petroleum exploitation. In this new light, and with a greater understanding of early agricultural societies throughout Mesoamerica, scholars are reevaluating and clarifying many of the traditional interpretations regarding the Olmecs. While these ancient people were unquestionably precocious and the creators of many sophisticated works of art, their rise and fall, religion, interactions with other peoples, and legacy to subsequent civilizations are understood quite differently today than previously imagined.

EARLY RESEARCH AND PERCEPTIONS

The foundations of Mesoamerica's great civilizations were laid during the Formative (or Preclassic) period. Primarily on the basis of marked extra-regional changes in certain common ceramic and figurine types, archaeologists have subdivided the Formative into Early (2000 to 900 BC), Middle (900 to 500 BC), and Late (500 BC to AD 100)

periods. Within that span of more than 2000 years, Mesoamerica witnessed the change from simple agrarian societies to state-level, urbanized population aggregates. Much of the evolution and spread of cultural complexity during the Early and Middle Formative traditionally has been credited to the Olmecs, commonly regarded as the dominant and influential cultural force of their age.



Olmec scholarship was initiated with Matthew Stirling's pioneering research in southern Veracruz and Tabasco states. Particularly significant were his 1942 and 1943 excavations at La Venta. Drawn to the site by the presence of Olmec colossal stone heads, thrones ("altars"), and stellate, Stirling and his associate Philip Drucker focused their investigations on a large plaza immediately to the north of the site's tall (32.3 m) earthen pyramid. Their finds were astounding. Excavating along the plaza's centerline, they uncovered colored clay floors, caches of polished jade celts, a carved stone sarcophagus in the form of an Olmec supernatural creature ("tigre") and a large "log" tomb built of columnar basalt. Burial paraphernalia--jade jewelry and figurines--lay on the tomb floor. Excavations beneath a nearby platform mound revealed an immense (27 m) serpentine mosaic pavement. The multitude of stone objects was extraordinary for a locale bereft of stone resources.

Whereas scholars now realize that those magnificent discoveries date to the culmination of Olmec complexity (about 700 to 500 BC), they were uncovered at a time when little else was known of the Olmecs, and dating was uncertain. The finds

became an archetype for defining the Olmecs and for drawing comparisons with other early Mesoamerican societies, who consequently appear less sophisticated. That perception strongly influenced archaeological interpretations throughout Mesoamerica for decades thereafter.

THE OLMECS

The magnificent stone monuments found at Olmec sites make their society recognizably unique among Mesoamerica's early agriculturalists. Particularly striking are colossal heads, three-dimensional portraits in stone of various Olmec rulers. The motifs incorporated into many of their head coverings seem idiosyncratic to those individuals, i.e., they may represent simple "naming" devices. Identified rulership is, in fact, perhaps the most important aspect of all forms of Olmec monuments. Those rulers are shown seated in the frontal niches of the great Olmec table-top thrones, seated and standing in three-dimensional statues, and in bas-relief on large stelae.

Olmec monuments are clustered in and around four large sites. Two of them, La Venta and San Lorenzo, are adjacent to major rivers and flood plains. To the west, in contrast, Laguna de los Cerros and Tres Zapotes are on upland plains extending outward from the Tuxtla Mountains. Their abundant monuments led to the discovery of each of the four sites and are one of several reasons leading archaeologists to believe that those sites were the major regional Olmec political-religious centers.

Today's archaeological knowledge of the Olmecs comes almost exclusively from excavations of limited areas of La Venta and San Lorenzo. Both are riverine sites, constructed above the flood plains on low hilltops which the Olmecs leveled and remodeled over time. Originally thought of as vacant ceremonial complexes supporting only a small priestly population, recent research projects at those sites have actively sought and located abundant household remains, and the sites are better viewed as the remains of thriving communities. However, despite the work of various research projects, the actual nature of the four major centers themselves and the layout and organization of their public mound architecture are poorly understood.

Complicating such research is the fact that all four are large, multi-component sites, with centuries of significant post-Olmec settlement and mound-building. Post-Olmec deposits frequently obscure all Olmec remains, and visible site size and mound configuration cannot be assumed to follow Olmec period patterns. That, together with the lack of detailed chronologies, makes it currently impossible to generate comparative assessments of the relative size and power of individual centers at particular moments in the course of Olmec prehistory.

Among the architectural features at both La Venta and San Lorenzo are parallel earthen mound arrangements that excavators suggest were courts for the rubber-ball game. In the Americas such games have great antiquity, particularly among societies in the tropics, the source of natural rubber. Rubber was produced on the Gulf coast in pre-Hispanic times, and it is not surprising that the Olmecs also participated in such games. Amazingly, several rubber balls were recently discovered together with other Olmec objects (including more than two dozen carved wooden heads), preserved in the mud of an ancient spring at the site of El Manati, near San Lorenzo.

Although four major centers can be identified, the remaining political hierarchy within the Olmec domain is poorly understood. The farmers, the majority of the Olmec population, probably would have lived in villages and hamlets lacking monumental art and public mound architecture. Those settlements are far more difficult to discover in a region of dense grasses, sugarcane, and centuries of alluvial deposits. Thus, the current understanding of the Olmecs is biased toward large centers, monumental art, and impressive ritual offerings. Beyond the knowledge that the achievements at the centers were supported by a population subsisting primarily on slash and burn maize agriculture, little more can be said of general lifeways or subsistence practice.

ORIGIN OF THE OLMECS

When archaeologists renewed excavations at La Venta in 1955 and still found no clear local antecedents to that site's sophisticated material culture, they nonetheless

recognized that the missing precursors might be found elsewhere on the site or within the Olmec domain. However, others perceived the "absence" differently and looked to distant areas of Mesoamerica where Olmec-like artifacts had been found, hypothesizing origins there [or overseas: see this issue's lead article]. Because the Olmec territory had barely been explored, such pronouncements were unquestionably premature. The Olmec's antecedents became much clearer two decades ago, when excavations at San Lorenzo uncovered a lengthy stratigraphic record which included more than four centuries of pre-Olmec occupation showing an in situ evolution into the basic complex of ceramics and stone art that archaeologists identify as Olmec. Comparably early materials have recently been recovered from sites on ancient river levees near La Venta.

Linguists now suggest that the Gulf coast ancestors to the Olmecs were speakers of a proto-Mixe-Zoquean language and, therefore, linguistically related to contemporaneous peoples of the Pacific coast of Chiapas, Mexico. Such a probable relationship is also supported by strong similarities between the early pottery of San Lorenzo and of coastal Chiapas at ca. 1500 BC. Because scholars once thought the Olmecs had spoken a Mayan language, it is interesting to note that about 700 BC some Maya-like "influences" do appear in Gulf coast pottery. It is not implausible, therefore, that the Olmecs' language underwent some "Mayanization."

MONUMENTS, WARFARE, AND REVOLUTIONS

Although warfare and disputes between Olmec centers or with neighboring societies undoubtedly occurred, such events are not currently evident in the archaeological record. The one data set that has customarily been interpreted as reflecting such violence--monument mutilation--has in all probability been misunderstood. The Olmecs' magnificent stone monumental art is nearly always found purposely damaged and mutilated. Heads and arms are missing from statues of rulers, faces have been ground away from bas-relief carvings and massive fragments have been knocked off table-top thrones. Only the colossal portrait heads survived relatively unscathed. The mutilation of the monuments has

customarily been attributed to non-Olmec invaders or to internal Gulf coast revolutions. The iconoclasm is often said to have occurred twice during the Olmecs' prehistory once ca. 900 BC and again ca. 500 BC--coincident with the end of the Early and Middle Formative periods.

However, the monument destruction follows a very regular pattern over many centuries and across great distances and seems to have been a relatively continuous rather than sporadic act. It seems more probable today that monument breakage was carried out by the Olmecs themselves for symbolic, sacred, or ritual purposes. Many monuments are associated with specific rulers and some evidence indicates that a ruler's monuments may have been destroyed at his death. Two of the colossal stone heads at San Lorenzo were recently found to have been resculpted out of large rectangular Olmec thrones which implies that some throne mutilation may actually have been a functional, requisite step in converting them into colossal portrait heads.

EXTERNAL RELATIONS

Many of the Early Formative ceramics and Middle Formative greenstone objects labeled as Olmec in museums, archaeological collections and books, were actually found at sites far distant from the Gulf coast. Such artifacts are similar in form and iconographic motifs to those used by the Olmecs, and for decades they have been

SOLVING THE MYSTERIES OF THE OLMEC



interpreted as representing influences or trade from the Olmecs. Implicit in those interpretations is the belief that the Olmecs originated and dispersed those motifs and objects. Some scholars are now questioning the traditional interpretation. They point out that the artifacts in question are not uncommon and always constitute an integral part of local assemblages. This perspective treats the objects as locally created manifestations of a common Mesoamerican symbolic substratum which each society, including the Olmecs, used and modified somewhat differently. It does not presume *a priori* that the motifs and artifacts are in any way associated with the Olmecs, nor does it necessarily credit the Olmecs with influencing societal evolution across Mesoamerica. The newer non-traditional perspective can be called multi-regional as opposed to the long-standing Gulf coast-centric view. Whichever position one takes, current archaeological data and dating methods lack the precision to resolve the issue.

RELIGION AND COSMOLOGY

The Olmecs' religion included cosmological beliefs common to many Formative period societies and can be partially reconstructed from consistent patterns in the iconography found on Early Formative pottery and Middle Formative greenstone objects. The cosmos incorporated two basic realms: the world of humans--the Earth's surface--and an extra-dimensional otherworld, a realm with both celestial and underworld aspects that was the abode of supernatural forces. Peoples across Mesoamerica believed that certain geographic features of their landscape were sacred, particularly mountains, caves, clefts in the Earth's surface, and bodies of water. Such features were thresholds to the otherworld and its supernatural forces. Sacred landmarks were also symbolically replicated and incorporated into the building programs of the ceremonial centers.

Early identifications of feline features and jaguar deities in the art of the Olmecs seemed logical when first proposed, but were incorrect and thus led to decades of misunderstanding of the complex iconography. The most recent research suggests that the motifs on Early Formative pottery primarily depict two very un-feline

supernatural animals which are represented both as semi-naturalistic creatures and as highly abstracted motifs. They apparently represent the two major aspects of the Earth's surface upon which humans live: land and water. Land seems to have been conceptualized as a crocodilian floating in the primordial sea, and the motifs predominant in pottery depict that crocodilian or caiman-like Earth/earthly fertility supernatural. It is most commonly rendered as a stylized abstraction consisting only of its head in right profile (eye, flame-like supra-orbital plate, and upper mandible) and one foot or paw. The supernatural's upper mandible was used alone as a common symbol for the Earth's surface. The carved stone sarcophagus, which Stirling unearthed at La Venta, represents one of the finest portrayals of this saurian.

The second supernatural is associated with water, appropriately characterized by a fishlike body. Interestingly, it often has two sharklike features, a black U-shaped eye and a large protruding front tooth. Because it is normally executed as a highly abstracted motif, it was only recently identified. Actual sharks' teeth found in ritual context at La Venta, together with some iconographic evidence, suggests that this supernatural may have been related to ritual bloodletting.

The cosmology, rendered in material form and used to graphically sanctify various groups or activities within society, evolved concurrently with social complexity. By 900 BC it began to reflect a transformation underway in Mesoamerican societies, the emergence of more powerful elite groups. A third supernatural animal, the serpent, became important at that time, but only in the artistic media controlled by those elite groups. The serpent was a symbol closely associated with rulership.

WHAT HAPPENED TO THE OLMECS?

The end of the Olmecs may seem puzzling, but only because the archaeological stratigraphic record for that period on the Gulf coast, ca. 500 to 300 BC, is almost non-existent. Their demise, however, may have been nothing more than evolutionary.

(continued on p. 14, col. 2)

("Who Got to America First?" cont'd from p.4)

The hypothesis that important cultural transfer from West Africa to Mesoamerica occurred was first put forward by Prof. Leo Wiener of Harvard University in several books published between 1920 and 1926. A professor of Slavic languages, Wiener thought that he had discovered important linkages based on "sound-a-like" resemblances between the languages of the two areas. He also found what he considered to be other important comparative resemblances in materials as varied as women's hair styles and tobacco pipes.

Wiener's researches were the impetus for Prof. Van Sertima's own involvement with this topic, and they now form an important bit of data for Afro-centrist historical arguments. Unfortunately current archaeological research in Mesoamerica fails to support any of the claims of Wiener and Van Sertima for direct connections between the two areas. Where were the African landfalls in Mesoamerica, and why are there no African cultural artifacts observable in the well-excavated sites of the Olmec of the Mexican coast? [Furthermore, the new chronology for the development of Olmec culture places its beginnings considerably before 700 BC (see David Grove's article).]



Until we have solid archaeological evidence to support other hypotheses, it can be said quite clearly that, No, Columbus was not the first to find America, nor were the Vikings, although they beat Christopher by about 500

years. Instead, it was small bands of Native Americans who first "discovered" the New World via the Bering Strait many thousands of years earlier. At present, although certainly not an impossible hypothesis, there is no credible evidence so far discovered that links any of the oft-cited Trans-Atlanteans with any archaeological discoveries in North America. As far as is now known, the Native Americans were the masters of their own fate. They produced their myriad diverse cultures throughout the New World independent of foreign intervention.

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Radner, Daisie and Michael Radner. *Science and Unreason*. Belmont, CA: Wadsworth, 1982.

Williams, Stephen. *Fantastic Archaeology: The Wild Side of North American Prehistory*. Philadelphia: University of Pennsylvania Press, 1991.

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[Editor's Note: More detailed discussions of the Kensington Rune Stone, Viking discovery of America, and Barry Fell theories are available from the Anthropology Outreach and Public Information Office, NHB MRC 112, Smithsonian Institution, Washington, DC 20560.]

"RETHINKING COLUMBUS"

Rethinking Columbus, a special edition of *Rethinking Schools*, consists of essays and resources for teaching about the Quincen-tenary. Published in collaboration with the Network of Educators on Central America, this issue provides teachers and students with a Native perspective. Write: *Rethinking Schools*, 1001 E. Keefe Ave., Milwaukee, Wisconsin 53212; or call (414) 964-9646.

("Ethnographic Interviewing" cont'd from p. 8)

the class. I also ask students to look for cultural themes, the general propositions or core values that seem to tie different parts of an informant's cultural knowledge together.

The final product of student research is an ethnographic paper organized around some general observations about a micro-culture, but a paper that also contains ample cultural illustrations in the form of descriptions, taxonomies, paradigms, and informant quotes. If the paper is successful, the reader ought to be able to see the world, including its challenges and solutions, through the eyes of the informant and people like the informant. I feel the course is successful if after students have taken it they walk into new situations and ask themselves, "I wonder what the inside rules are around here? What am I supposed to do and say and why?"

Recently I visited a local restaurant where I found one of my ex-students waiting on tables. She came over and quietly spoke to me. "You are sitting in section six. This section has the most 'customers' during 'evening rush,' is good if you want to make 'high tips,' is too far from the kitchen for comfort, and requires you to walk around an awkward corner to reach it." Only a student who is also an ethnographer would say a thing like that!

ADDITIONAL READINGS:

Spradley, James P. and David W. McCurdy, *The Cultural Experience: Research in Complex Society*. Chicago: SRA 1972. Reissued by Waveland Press, 1988. This book contains four chapters for students describing how to do ethnographic research as well as 12 papers by Macalester undergraduates, which serve as examples.

Spradley, James P., *The Ethnographic Interview*, New York: Holt 1979. A more detailed, step-by-step set of instructions for doing ethnography based on teaching experiences at Macalester College.

Reference cited:

Sharon Saydah, "Closing the Deal: Ethnography of Car Salespeople.

"Unpublished Macalester College Paper, 1991.

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* * * *

("Updating Olmec Prehistory" cont'd from p. 12)

Viewing the archaeological record is akin to viewing an incomplete photographic record of someone's life. In one snapshot you may see a teenager, and in the next an adult who looks somewhat like the teenager but the transition is missing. When did the teenager end and the adult begin? The Olmecs are known and identified by a series of specific pottery types, figurines, and monuments. It is not unlikely that over several centuries those "defining" characteristics were gradually replaced by new material features and social symbols, the Olmecs simply evolving out of their Olmecness. The next glimpse of Gulf coast prehistory shows us Tres Zapotes again, which continued to be occupied and which maintained a modified monument tradition, as one descendant of the Olmecs. Even the Classic period Maya appear to carry an Olmec legacy in their cultural baggage, particularly in their basic cosmos, use of monumental art to communicate political cosmology, and use of certain symbols of royal power in art and hieroglyphs.

[A longer version of this article can be found in *National Geographic Research and Exploration*, vol 8, no. 2, pp. 148-165, 1992.]

FOR FURTHER READING

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Grove, David C. *Chalcatzingo: Excavations on the Olmec Frontier*. London: Thames and Hudson, 1984.

Rust, W. F., and Sharer, R. J. "Olmec Settlement Data from La Venta, Tabasco, Mexico." *Science* 242:102-104, 1988.

Sharer, Robert J., and Grove, David C., eds. *Regional Perspectives on the Olmec*. Cambridge: Cambridge University Press, 1989.

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* * * *

TEACHING MATERIALS FOR "SEEDS OF CHANGE"

Helpful teaching materials are available in conjunction with "Seeds of Change," The Smithsonian Institution Exhibition commemorating the Quincentennial of Columbus's voyages. A panel version of the exhibit, organized by SITES (Smithsonian Institution Traveling Exhibition Service) and the American Library Association (ALA), will travel to approximately 60 sites around the country. For information, write: American Library Association, 50 East Huron St., Chicago, IL 60611; for the SITES locations, write: SITES, 1100 Jefferson Dr., S.W., Washington, DC 20560. In addition, a poster show of "Seeds of Change," produced by SITES and USIA (U.S. Information Agency), will be circulated in English, Spanish, and French to over 170 locations throughout the world. For information on the U.S. distribution of the poster show, write to: Esther Mackintosh, Vice-President, Federation of State Humanities Councils, 1012 14th St., N.W., Suite 1007, Washington, DC 20005, or call (202) 393-5400.

The Columbus voyages and following expeditions began a period of cultural and scientific exchanges that dramatically changed the entire world. Five "seeds" were planted in that series of exchanges. Infectious diseases, the horse, and sugar were all introduced by the Europeans to the Americans; corn and the potato were taken from the Americas to Europe and beyond. *Seeds of Change: A Quincentennial Commemoration*, edited by Herman J. Viola and Carolyn Margolis, consists of an illustrated collection of scholarly essays. To order, write: Smithsonian Institution Press, Dept. 900, Blue Ridge Summit, PA 17294, or call 1-800-782-4612.

Elementary Level

Science Weekly offers 16 issues devoted to the five seeds of change: corn, potato, disease, the horse, and sugar. Each issue is written for seven learning levels of increasing difficulty so that teachers can select the level most appropriate for their students. Each issue contains appealing color graphics, puzzles, a lab, vocabulary, a problem, a challenge, and writing for science exercises. To order, write: Subscription Department, P.O. Box 70154, Washington, DC 20088-0154, or call (301) 680-8804. Cost: more than 20, \$3.95 per year.

Middle School

Seeds of Change: The Story of Cultural Exchange after 1492 by Sharryl Davis Hawke and James E. Davis, Addison-Wesley Publishing Co., 1992, 96 pp.

This excellent booklet, based on the exhibit and recent research by scholars at the Smithsonian, tells how each "seed" radically changed both the Old and New Worlds. The text contains an inviting layout, script, and color pictures and drawings. To order, write: Addison-Wesley, Jacob Way, Reading, MA 01867. Cost: \$10.36. Teacher's Guide: \$5.40.

High School

Seeds of Change: Readings on Cultural Exchange after 1492, Joint Project of the National Museum of Natural History, Smithsonian Institution and The National Council for the Social Studies, Addison-Wesley Publishing Co., 1993, 126 pp.

Based again on the "Seeds of Change" exhibit, this booklet contains four to five informative, engaging articles about each seed written by archaeologists, anthropologists, and historians. To order, see above address. Cost: \$10.36 each. Teacher's Guide: \$5.40.

JoAnne Lanouette

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Anthro Notes

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MODERN HUMAN ORIGINS -- WHAT'S NEW WITH WHAT'S OLD

In a lecture at George Washington University this September, Richard Leakey argued that one of the most controversial and least well-understood events in human evolution occurs toward the end of the story. Where, when, and why did modern humans like ourselves first appear, and how did they come to occupy most of the earth?

Study of this stage of evolution is not new; in fact, it began more than 160 years ago with the first discovery of Neandertal fossils in Belgium in 1830. As early as 1868, the co-existence of extinct animals such as mammoths with anatomically modern but very robust humans was documented at the site of Cro-Magnon, in southern France.

Why don't we know more after all this time about an event so close to our own era? And why are the arguments over this event so bitter?

WHAT'S SO MODERN ABOUT MODERN HUMANS?

Anatomically modern humans are distinguished from their predecessors by their relatively "gracile" (less robust or less muscular) skeletons and smaller teeth. Males, in particular, became smaller and overlapped the female size range to a greater extent than previously. Although brain size did not increase in moderns from the preceding "archaic" stage, the braincase itself became taller, less elongated from front-to-back, and more sharply flexed at its base, where it joins the face. In essence, the face became almost completely situated under the braincase, rather than sticking out in front of it as in earlier human ancestors and other primates. Smaller teeth also left the chin sticking out in front, and reduced the need for heavy browridges to take up some of the stress of chewing. (If



THE "CANDELABRA" VS. THE "HATRACK" THEORY

you put your fingers on your remnant "browridges" over the outer corner of your eyes and clench your teeth, you can feel the chewing stress transmitted to the browridge area). Archaic Homo sapiens, with modern-size brains but big brow-ridges, large faces, and large teeth, occupied Europe, Asia and Africa before the appearance of modern Homo sapiens. The term "Neandertals" refers in some theories to one relatively isolated, cold-adapted population of these "archaics." In other theories, Neandertals refers to all later "archaics," ca. 130,000 to 40,000 B.P. (before present).

CANDELABRAS AND HATRACKS

Throughout this century, two basic variants of the story have vied for acceptance by the scientific community. The "candelabra" view recognizes only one major branching of the human line. After the initial dispersal of humans to the three major Old World continents, beginning as early as 1.1 million years ago with the species Homo erectus, the populations of each region evolved in parallel fashion into modern humans. Some migration or gene flow between the regions assured that new characteristics appearing in one region would eventually spread to all. In this theory, most of the immediate ancestors of the modern humans of Africa are found in Africa, while the immediate ancestors of the Chinese are found in China and so forth.

According to this view, the immediate ancestors of Europeans are their predecessors on that continent--namely the Neandertals. The current version of the "candelabra" theory is referred to as "multi-regional evolution" (MRE), because it allows more migration from region to region than earlier versions.

In a contrasting view, known as the "hatrack" theory, a single main stem or center pole leads to modern humans, with branches at intervals through time representing evolutionary dead ends. According to this theory, the Neandertals of

western Europe are one such dead end; the "Peking Man" or Homo erectus fossils of east Asia are another. Until recently, the central stem was always given a European or Near Eastern identity, through such fossils as "Piltdown" (a now-discredited forgery), Swanscombe (a large English skullcap without a face, dating to a period just before the earliest Neandertals), or the Skhul fossils from Israel. The central role of Europe in human evolution was attributed by some to the influence of a colder climate, a limited growing season, and more reliance on both hunting and food storage, all of which would have promoted intelligence and growth of the brain.

In the current version of the "hatrack" theory, however, the central stem is African, and all the earlier fossils of other continents constitute the dead ends of human evolution. Since, in this view, all anatomically modern humans derive from recent African ancestors, the modern theory is called the "out-of-Africa" hypothesis.

How can two such disparate views continue to co-exist? Why does not the data exclusively support one or the other? And why has the "hatrack" school shifted its focus from Europe to Africa? Three new D's--new dates, new data (fossil and archaeological) and new DNA studies--have combined to create a heightened level of argument over modern human origins.

DATING THE DATA

By 35,000 years ago, the shift to modern humans was virtually complete throughout Europe, Asia, Africa and even Australia. The most accurate dating technique for the later periods of archaeology, radiocarbon, gives good results back to about 35,000, but not much older. Some dates of 38 to 40,000 are acceptable, but dates in the 40,000 or older range are decidedly dubious. Most of the story of modern human origins lies beyond 40,000 years ago. Until recently, there were no reliable ways to determine the age of anything between 40,000 and 200,000 years ago.

Recently, however, a range of new techniques have come into general use for exactly the period when modern humans must have emerged, between 200,000 and 40,000 years ago. These techniques include: 1) measuring the accumulation of "radiation damage" from soil radiation in buried crystalline materials such as flints or quartz sands (thermoluminescence), 2) measuring the decay of uranium which soaks into buried bones and teeth from groundwater (uranium series), or radiation damage in the crystals of tooth enamel (electron spin resonance), and 3) studying the decay of the proteins encapsulated in hard tissues of fossil animals such as mollusc shells, bones, teeth, and ostrich eggshells (amino acid racemization).

Unlike radiocarbon, none of these techniques is entirely independent of the burial environment. Thermoluminescence and electron spin resonance dates can be thrown off by inaccurate measurement of the soil radiation or by heating or re-exposure of the sample before the archaeologist finds it. Protein decay rates are dependent on temperature, which is difficult to estimate for 40,000 to 200,000 years ago. And the uranium which soaks into bones and teeth can also wash out again. Using two different techniques to date the same site can help avoid these problems, at least when the two sets of results agree.

The effect of the new dating techniques has been to make many sites and fossils in Africa earlier than was previously thought. The European dates did not change quite as much, because the ebb and flow of ice ages had provided a chronology that tied most of the sites together, even in the absence of exact numbers.

Once the chronology of Africa was based on its own internal sequence of dates, comparative faunal extinctions, and climate changes, it became obvious that the earliest fossils in Africa with "chins" and small teeth were much older than the Cro-Magnons of Europe. In a paper given last spring on ostrich eggshell dates, I and my

colleagues suggested that several of the most important early African sites with modern humans (Klasies River Mouth and Border Cave) date to as much as 105,000 years ago or older. Modern human teeth at Mumba shelter in Tanzania were dated to ca. 130,000 years by uranium series.

Meanwhile new dates for Zhoukoudian (Peking Man sites), and other sites from China and Java suggest that east Asia was occupied exclusively by the more primitive species Homo erectus until about 300,000 years ago. The new Chinese fossils announced this year that supposedly represent a transition between erectus and sapiens do not show that this transition happened in China first, as several newspaper reports seemed to suggest. That the earliest modern humans were African seems quite well-established, although very few sites have been dated thus far.

In Europe, the principal effects of the new dates have been twofold. One is to demonstrate the great antiquity in Europe of the Neandertal-type long face, big nose, and flattened bulge at the back of the head. The oldest fossil now referred to as Neandertal (Le Biache, France) was discovered in 1976 and is about 190,000 years old, while older fossils (for example, Arago in the Pyrenees) with some Neandertal characteristics, date to the 300,000s or older. Secondly, newer, more precise radiocarbon dates from the end of Neandertal times, show that, in particular areas, the transition from Neandertal to Cro-Magnon was quite abrupt. A Neandertal from St. Cesaire in France, found in 1979, is about 35,000 years old, while the Cro-Magnon fossils probably date to at least 34,000, based on comparisons with the Pataud site next door. Such an abrupt transition does not leave enough time for evolution to have occurred in place. In addition, the oldest modern human fossils and archaeological sites of the Aurignacian culture of Cro-magnon are found in eastern Europe just before 40,000 years ago, while Neandertals still lived in the west, just what one would expect if modern humans invaded Europe from

Africa via the Near East. And in the Near East itself, modern humans from Qafzeh, in Israel, excavated in the 1960s, have been dated to ca. 92,000 years ago by thermoluminescence on burned flints, and a similar antiquity was suggested for at least some of these fossils by our work on ostrich eggshells.

One problem in the Near East remains the chronological relationship of the Qafzeh modern humans to Neandertals. What might explain Neandertal dominance of this region after a brief period of modern human occupation at 92,000 years? One possible answer lies in the tiny bones of birds, rodents and insectivores found with the human fossils. Earlier modern humans are accompanied by tropical African birds, mice, voles and so on, while later Neandertals are accompanied by cold-adapted animals from Eurasia.

If Neandertals were the cold-adapted archaics, and the earliest modern humans were tropical, this shifting pattern implies that the distribution of the two populations was originally limited by ecological considerations, and that the Near East represented a boundary zone that shifted as the world's climate changed. By 40,000 years ago, when modern humans returned to dominate the region, they seem to have invented a way to get around this ecological limitation. The animals found at the post-40,000 year-old modern human sites remain primarily cold-adapted.

THE 'AFRICAN EVE' HYPOTHESIS

That humans were "modern" in appearance in the tropics long before these characteristics appear in Europe seems confirmed by the new dates and data. But what is the relationship of the first modern humans in Africa to the later ones who occupied Europe after 35,000 years ago? This relationship is the hottest part of the current controversy.

In 1987, geneticist Rebecca Cann and colleagues proposed that a recent migration out of Africa within the last 200,000 years

had totally replaced all other human populations. None of the "archaic" East Asians, or the Neandertals of Europe had left any descendants at all. All modern humans share a recent African ancestor. The data used to support this hypothesis did not come from the fossil record, or from the dating lab, but from analysis of genetic differences among people living today.

The most common and abundant genetic material (DNA), which occurs in the nucleus of the cell, changes too slowly to measure recently evolved differences--even comparing humans to chimpanzees reveals a less than 1% difference between the two species. But mitochondria, small organelles within cells that are important in converting food to energy, contain a more rapidly changing form of DNA. Since sperm consist almost entirely of nuclear DNA and lack mitochondria, your mitochondria derive entirely from your mother via the ovum. A family tree of human genetic similarities, based on mitochondrial DNA (mtDNA), reflects only female ancestry, hence the "Eve" in the hypothesis.

This last common ancestor of all humans is thought to have been African because Africans are more variable in their DNA than the peoples of other continents, which suggests that they have been in place the longest. Furthermore, some genetic variants are unique to Africa, while all the variants on other continents are found in Africa as well. If Neandertals from Europe or Homo erectus from China contributed to our ancestry, where is their unique DNA?

What about "Adam"? A similar study was done on the genetics of the Y-chromosome, which appears to determine maleness but little else. Family trees based on similarities in genetic make-up of the Y-chromosome reflect only male ancestry, since women do not have one. The same pattern was observed--greater variability and unique patterns in African populations, but no unique patterns outside that continent. The

(continued on p. 12)

TEACHERS CORNER: ELECTRONIC LABORATORY

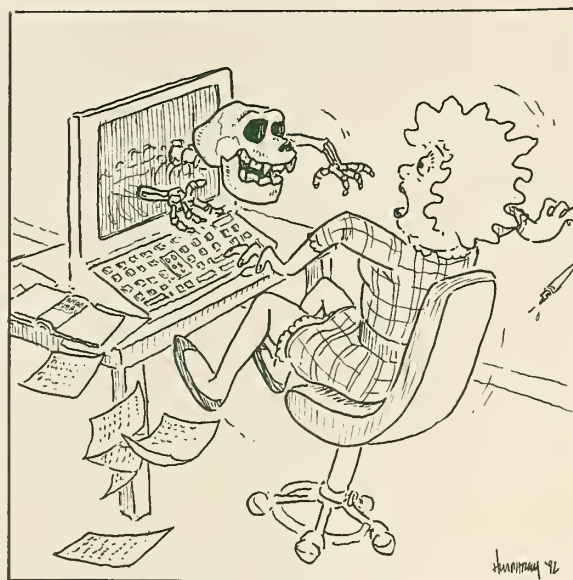
How can you outfit a physical anthropology lab for less than \$20? How can you teach your students archaeological sampling and surveying during a Wisconsin winter? Several good simulation programs allow students to carry out research via the computer. Two of the best and most widely-used are "Mystery Fossil" for Macintosh computers by J.T. Omohundro and K. Goodman (distrib. Mayfield Publishing Co, 1990, \$16.95 for version 2.0) and "Adventures in Fugawiland" for IBM-compatible computers, by D. Price and G. Gebauer, (also distrib. by Mayfield Publ. Co., \$17.95 for version 2.1).

Mystery Fossil is designed for Macintosh computers. Like most Macintosh applications, a series of menus leads the student from one task to another. Students are given excellent illustrations of three "unknown" fossils (actually KNMER-1813, 3733, and Kabwe), and asked to place them in a fossil species and on a human family tree. They can study each fossil inside, top or front view. A movable ruler allows the student to measure the distance between any two points on the skull by clicking the mouse on those two points. For each fossil, a series of note cards can be called up, giving information on the discovery, geological context, age, environment, associated artifacts and fauna, and morphology of the fossil. The electronic glossary provides definitions of technical terms. In addition, a list of comparative fossils of known species is given for each "mystery fossil"; pictures of these can be called up and studied in the same way as the unknown.

Students type notes for each fossil on a set of computer note cards, which are saved. Once the data has been collected, the program presents three phylogenies and asks the student to first choose the most appropriate phylogeny for his/her understanding of human evolution at that time, and then to "paste" the mystery fossil

onto the appropriate species and location on the family tree. Finally, the student can cut and paste the notes and phylogeny into a final report, which answers the questions "to which species do you assign the mystery fossil and why?", "which phylogeny best represents this phase of human evolution and why?" and "where on the phylogeny do you place the mystery fossil and why?" In the brief accompanying manual (16 page) is a set of hints on "how to think like a palaeoanthropologist."

My students in introductory anthropology have been signing up to do this "lab" for extra credit, in a fifty-minute period. They enjoy it, but find the ruler somewhat clumsy to use. "Mystery Fossil" 2.0 requires a Mac Plus, SE, or II with at least 1 mb memory, system 4.1 or later, a HyperCard (and updated home stack) 1.2 or later, a printing resource file (e.g. Imagewriter, Laserwriter) and a printer.



The other program, "Adventures in Fugawiland" shows the student a prehistoric landscape (on the west side of Lake Michigan) and asks him/her to choose and excavate 10 of 25 archaeological sites, labelled only by letter. Choice of site is based on a random number table, or on an intuitive sense of which sites best represent the entire range of environments. The computer "excavates" each site and shows the results as a plot of features and

artifacts, and as a table of site contents. Once two sites have been excavated, the student may compare the sites in terms of contents, location relative to landscape features, elevation, etc. Comparative data may be displayed graphically in bar graphs (e.g. number of houses per site) or plots of two variables (e.g. number of obsidian knives at each site vs. number of copper knives at the same site.) At least nine sites must be "excavated" before constructing a plot. The program also tests students on their knowledge of prehistoric Wisconsin gained through archaeological excavation.

With the option "Multiple choice questions," the computer randomly selects ten questions, and prints out the student's answer sheet. A 100-page manual contains much useful information about excavation strategies, dating, and data analysis. This program may require as much as three hours to complete, but an abbreviated version can be completed in under one hour. "Adventures in Fugawiland" requires a DOS-based computer with graphics capability, and runs from one floppy disk drive.

Alison S. Brooks

* * *

NEW NETSILIK FILM SERIES

Documentary Educational Resources provides films and videos for teaching anthropology. The most well-known series in the collection are John Marshall's films on the !Kung San of Namibia and Tim Asch and Napoleon Chagnon's work on the Yanomamo of Venezuela. Acquisitions of other filmmaker/anthropologist teams include work on the Alaskan Eskimo, the Maasai, Balinese healers, U.S. immigration, New Guinea tribes, Andalusian religious festivals and more. Our most recent addition is the Netsilik Eskimo series.

The Netsilik Eskimos of the Pelly Bay region in the Canadian Arctic had long lived apart from other people and had depended entirely on the land and their own ingenuity of sustain life through the rigors of the Arctic year. A minimum of cultural reconstruction was required during the filming; the Netsilik families readily agreed to live in the old way once more and showed considerable aptitude in recalling and representing earlier ways of life.

The Netsilik series was produced under grants from the National Science Foundation and the Ford Foundation, Education Development Center, Inc., and the National Film Board of Canada. The filming was done during the summers of 1963 and 1964 and winter of 1965 under the direction of Asen Balicki and Guy Mary-Rousseliere, both anthropologists with Arctic experience. The series was released in film in 1967 and became part of a widely used social studies curriculum, *Man: A Course of Study*. The entire series is now available in video format.

For more information on the series and DER's collection, please contact:

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Judith Nierenberg

POINTS OF VIEW: MULTICULTURALISM AND MUSEUMS

The last decade has witnessed heated national debate on multicultural issues--debate causing unrest on our nation's campuses and arguments in our nation's classrooms and museums. What we teach, what we exhibit, what students read, who should be responsible for the teaching, the exhibiting and the writing--all has become, in the parlance of the day, "contested terrain." As Steven Lavine and Ivan Karp explain in their introduction to *Exhibiting Cultures: The Poetics and Politics of Museum Display* (1991):

Groups attempting to establish and maintain a sense of community and to assert their social, political, and economic claims in the larger world challenge the right of established institutions to control the presentation of their cultures. They challenge exhibitions that overlap with their concerns, demand real power within existing institutions, and establish alternative institutions (pp. 1-2).

The Smithsonian Institution, as the largest museum complex in the world, as well as one of our nation's most important research centers, has witnessed and participated in the creative energy of the multiculturalism debate, renewing its mandate to serve and

represent all of America's people. In its 1992 statement to the United States Congress, the Institution articulated its commitment to cultural pluralism:

The Smithsonian has deliberately adopted, in all aspects of its work, a viewpoint that is inclusive of the many cultures that form the Nation's heritage. Major new initiatives, such as the Institution's observance of the Columbus Quincentenary, the future National Museum of the American Indian, and the proposed national African American Museum exemplify the Smithsonian's commitment to preserving and presenting the expressions of the Nation's culturally diverse peoples. (Budget Justifications for Fiscal Year 1993:8)

In addition to planning entire new museums, the Institution has established new programs and new ties with various communities across the country.

In 1988 and 1990 the Rockefeller Foundation and the Smithsonian convened two conferences, "The Poetics and Politics of Representation" and "Museums and Communities," "charged with examining how museums exhibit cultures and relate to the multiple communities in which they are situated" (Karp, Kreamer, and Lavine:1). In 1990 a third conference was held, partially funded by the Ford Foundation, "Gender



CONTESTED TERRAIN

Perspectives: The Impact of Women on Museums." All three conferences considered multiculturalism issues as they impact on museums and all three conferences resulted in publications. The Gender Perspectives conference gave rise to a "Gender Issues Action Group" at the National Museum of American History that has created a set of Draft Guidelines and Questions ("Fulfilling the Mission: Incorporating Gender") to redress gender inequities in exhibits. The guidelines explain that:

Gender, defined in current scholarship as the social construction of 'man' and 'woman' is an important analytical tool which offers critical insights into historical processes. Like class and race, gender forces a consideration of power and diversity--diverse experiences, diverse perspectives, and the diverse impact of any event, technology, or era we attempt to understand and exhibit. (p. 2)

According to the Action Group, since gender pervades every museum exhibit, exhibits that do not recognize gender issues from the outset of planning tend to perpetuate stereotypes. As Robert Sullivan, Associate Director for Public Programs at the National Museum of Natural History and one of the Action Group's supporters, points out about his museum's anthropology cases, "95% of the women shown are seated or squatting in a position lower than men. Even in the case showing lions, the male lion is shown poised for the hunt, while the female rests curled around her young cubs, even though in reality it is the female lion that does most of the hunting." (Rebecca Browning, "Gender Messages in Museum Exhibitions," *Four Star Newsletter*:6). One of the exhibits Sullivan would like to change is an exhibit of Capt. John Smith trading with Powhatan Indians on the James River in 1607. In the exhibit, Capt. Smith stands in a commanding pose on his boat as a bare-breasted Powhatan woman gazes adoringly up at him from a canoe.

The goal throughout the Guidelines is to sensitize audiences to the "hidden messages"

of representation in exhibits, and while the focus is on gender, the guidelines make clear that similar guidelines could be developed for race and other issues of cultural diversity. The Guidelines urge people to think about familiar situations in a new way:

Many topics are understood as feminine or masculine. What is the dominant gender identification of your topic and why? Could your topic be broadened to be more inclusive (i.e. "tractors", a masculine topic can be broadened to "rural life," that is more inclusive)? Why is science considered masculine? How does masculinity shape science, and how is masculinity defined by science? Do women and men have different experiences and attitudes towards science? How will exhibits involving science deal with these gender issues? (p. 4)

Ivan Karp, in an Introductory Essay "Culture and Representation" asks the same basic question that the Smithsonian's Gender Equity Action Group is asking: "What do exhibitions represent and how do they do so?" (*Exhibiting Cultures*:11). Most people think of exhibits as either a neutral vehicle for displaying objects or a space for telling stories, but the hidden assumptions behind every exhibit, as behind every textbook, tell a different story; *Exhibiting Cultures* and the "Points of View Guidelines" help lift this "veil of hidden assumptions."

What an exhibitor chooses to display, how the objects or figures are arranged, how and what story is told or not told, who and what is included or not included--all these represent or misrepresent reality. As Karp explains, "Museums and their exhibitions are morally neutral in principle, but in practice always make moral statements." Furthermore, it is the alleged neutrality (and authority) of exhibitions that is the "very quality that enables them to become instruments of power as well as instruments of education and experience." (p. 14)

Students assume the authority of the textbook author much as visitors assume the authority of the exhibit curator--but knowledge changes almost daily, information is not frozen in time, and scholarship is filled with debate and informed by new perspectives, such as the new social history that is changing the way both men and women view our past. Since it can take ten or even twenty years to redo major museum exhibits, the "authority" behind these exhibits can be particularly problematical for young students, whose textbooks may be only five years out of date, but whose museum visits may be to exhibits even twenty years out-of-date.

Exhibitions, like textbooks, convey more than neutral information or facts. Like map projections, perspectives and values are represented in exhibitions and textbooks, particularly social studies textbooks. And here as well the insights from Lavine and Karp's volume, *Exhibiting Cultures*, are instructive: "the struggle is not only over what is to be represented, but over who will control the means of representing" (p. 15). Several of the volume's essays speak to this issue of control and creation, and it appears that the most powerful agent in the construction of exhibitions is "neither the producers of the objects nor the audience, but the exhibition makers themselves" (p.15). The objects (or facts or figures) are not neutral, and it is the exhibition creators (or textbook writers) who are actually

creating the reality. When these creators are dealing with the identity of "others," the debate over who should be creating that reality can become intense and divisive, such as when western anthropologists create exhibits describing non-western "tribal" peoples.

In Michael Baxandall's essay, titled "Exhibiting Intentions...", in *Exhibiting Cultures*, he likens an exhibit to a game in which there are three independent players--the original object maker, the object exhibitor, and the exhibit viewer--but "each of the three is playing, so to speak, a different game in the field" (p. 36). The object maker is a member of his or her own culture that is understood to the maker as to any insider; the exhibitor is the classic "outsider" attempting to understand the object and the culture from which it comes; and the exhibit viewer, more likely to share in the culture of the exhibitor, brings the first two players together. Baxandall's major point is that the viewer comes to the exhibit with his or her own set of assumptions and is thereby an active agent in the interpretation of the exhibit. Baxandall draws several prescriptive conclusions from his analysis:

- 1) that objects and artifacts least likely to be misunderstood are those made for exhibition (such as works of art);

(continued on next page)



2) that exhibitors should be explicit about the cross-cultural aspect of most exhibitions, including the viewer's cultural background;

3) that the exhibitor should emphasize factual material and leave interpretation and conclusions as much as possible to the viewer who is an active agent in the field of exhibition.

In this way the exhibitor will recognize that he or she "cannot represent cultures," and that "the activity the exhibition exists for is between viewer and maker (p. 41)."

Baxandall's conclusions, of course, relate as much to teaching as they do to exhibiting (just substitute the word teacher for exhibitor, student for viewer, and subject matter for object maker.) One can easily transfer Baxandall's analysis to the classroom since students come to any subject with their own assumptions and understandings, and what they take away from the classroom is a blend of what they discover anew and what they bring to the experience from their own past.

Teaching students about other cultures can be as daunting as creating exhibits to inform the public about other cultures. As Ivan Karp explains in his introductory essay, "Culture and Representation":

Cross-cultural exhibitions present such stark contrasts between what we know and what we need to know that the challenge of reorganizing our knowledge becomes an aspect of exhibition experience...Almost by definition, audiences do not bring to exhibitions the full range of cultural resources necessary to comprehend them; otherwise, there would be no point to exhibiting. Audiences are left with two choices: either they define their experience of the exhibition to fit with their existing categories of knowledge or they reorganize their categories to fit better with their experience. (p. 22)

But how can audiences, any more than students, be encouraged to "reorganize their categories," to shift their values and beliefs to fully understand other cultures' ways of dealing with the world, to understand that other voices, other ways of understanding the world exist? The challenge, according to Karp, is "to provide within exhibitions the contexts and resources that enable audiences to choose to reorganize their knowledge" (pp. 22-23). Many of the essays in the volume offer specific avenues through which exhibitors can, in fact, offer context and resources through which new voices can be heard, new voices can be represented and finally understood.

Voice, like representation, is a major theme in *Exhibiting Cultures*. Whose voices are represented in any exhibit (or, for that matter, in any account of the past)? In his introductory essay to Part 3, "Museum Practices," Steven D. Lavine asks several pertinent questions regarding voice:

How can the voice of an exhibition honestly reflect the evolving understanding of current scholarship and the multiple voices within any discipline? How can museums make space for the voices of indigenous experts, members of communities represented in exhibitions, and artists? How can the widely varying voices of museum visitors be heard by exhibition makers and reflected in their designs? Can an exhibition contain more than one voice, or can a voice exhibit more than one message? (p. 151).

Whose voices need to be heard? Just as some educators argue that students should have a larger role in determining curriculum, and that teaching should respond more directly to students' learning styles, so Elaine Heumann Gurian argues that because museum visitors are creators of meaning during their museum visits, so their voices should be heard in the planning, design, and development of exhibits. In a paper entitled "Noodling

Around with Exhibition Opportunities," Gurian argues that exhibition makers should enfranchise the learner, that "exhibition content and presentation are inseparable," and that "choice of style is an expression of intention" (pp. 176-77). Gurian argues for exhibitions that reach audiences through various learning styles and for exhibitions that use experimental, imaginative, affective, theatrical, entertaining, and hands-on approaches, such as those pioneered by Michael Spock and Gurian at the Boston Children's Museum and by Frank Oppenheimer at the San Francisco Exploratorium. "Regardless of exhibition content, producers can choose strategies that can make some portion of the public feel either empowered or isolated" (p. 177), and Gurian's approach strongly encourages museums to reach out to hear and respond to the widest possible diverse voices.

Audience, Voice, Multiple Perspectives, Representation, Empowerment, Contested Terrain - these are the key concepts animating the debate that continues to enliven museum exhibit halls and classrooms across America in the 1990's. *Exhibiting Cultures: The Poetics and Politics of Museum Display*, like the conference from which it came, illuminates much of this debate, that perhaps, in the end, is really about identity--the identity of our nation and ourselves, the identity of various groups struggling for their right to determine how they will be represented in our museums, in our classrooms, in our history books. As Ivan Karp explains:

What is at stake in struggles for control over objects and the modes of exhibiting them, finally, is the articulation of identity. Exhibitions represent identity, either directly, through assertion, or indirectly, by implication. When cultural "others" are implicated, exhibitions tell us who we are and perhaps most significant, who we are not. Exhibitions [or classrooms, or textbooks] are privileged arenas for presenting images of self and "other." (p. 15)

Considering issues of representation and reality, audience and voice, multiculturalism and cultural diversity, enables educators and exhibitors alike--whether in museums, schools, colleges or universities--to re-examine the impact of their work, and to ask what messages, hidden or otherwise, they are communicating--through exhibitions, textbooks, and classroom dialogue. The last two decades of our nation's debate over multiculturalism has, if nothing else, forced upon museum and school professionals alike a re-examination that undoubtedly will influence our disciplines and our professions for decades to come.

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(Both books can be obtained by writing Smithsonian Institution Press, Department 900, Blue Ridge Summit, PA 17294-0900, or call (717) 794-2148. *Gender Perspectives: The Impact Of Women on Museums* will be published by the SI Press but is not yet available.)

"Fulfilling The Mission: Incorporating Gender," Draft Guidelines of the Gender Issues Action Group, National Museum of American History. (These are not available; we will announce in *Anthro.Notes* if and when they become available to the general public.)

"Gender Messages in Museum Exhibitions" by Rebecca Browning. *Four Star*, Newsletter of the Smithsonian Institution's Women's Council, Fall, 1992.

Ruth O. Selig

("MODERN HUMAN ORIGINS" continued from p. 4)

most variable DNA in both studies belonged to the small isolated populations of hunter-gatherers in the Kalahari Desert (!Kung) and Zaire forest basin (Mbuti, Aka, Efe) respectively.

At first, the major debate was over possible errors or omissions in the sample (use of African-Americans instead of Africans, assuming little admixture in the maternal line) and the timing of the dispersal from Africa. Using the degree of differentiation developed within Australia and New Guinea (first colonized ca. 50-40,000 years ago), or among the populations of the Americas as a guide, it was estimated that human mtDNA diversifies from a common ancestor at a rate of 2-4% per million years. Since the total amount of difference observed in modern populations was only about 0.57%, this implies a time scale of 140-290,000 years since all humans last shared a common ancestor.

More recently, the family tree itself has been questioned on statistical grounds. Given enough time and repeated tries, the computer program used to generate the published family tree can also generate alternative trees in which Africa plays a diminished role. The genetic basis for total replacement of all previous human populations by the descendants of "African Eve" appears to be in doubt, although this does not negate the importance of the early fossil evidence from Africa.

ANCIENT AFRICANS, WHOSE ANCESTORS?

What was the relationship between the Neandertals or other archaics of regions outside Africa and their successors? Is there any evidence of population movement from Africa to Europe or east Asia? Did the invaders interbreed with the older populations of these areas, or did they simply wipe them out? Much of the argument hinges on current analyses of the fossils themselves. Three issues are central:

1) who were the Neandertals (and what "explains" their robust body form), 2) are there any intermediate fossils between Neandertals (or archaics) and modern humans, and 3) are there regional continuities in facial shape or teeth that continue across the transition from archaic/Neandertal to modern.

Up through the early 1970s, many scholars tended to lump Neandertals with other archaics as having modern brains and large primitive faces (and teeth). Western European Neandertals, whose faces were longer and more projecting, and whose elongated heads appeared to have an "occipital bun" of bone at the back, were simply more extreme than others. It was widely suggested that "if you gave a Neandertal a shave and a haircut [and a shopping trip to J.C. Penny], you wouldn't recognize him on the New York subway."

In the 1970's Erik Trinkaus began a lengthy study of Neandertals from a new perspective--below the neck. His study suggested very strongly that all Neandertals, including those from the Near East but not the archaics from tropical environments and east Asia, shared a common and very unusual "post-cranial" form. Their bones, even the fingers and toes, were extremely thick and bore heavy markings for the muscle attachments that could not be duplicated in modern samples of skeletons. The joint surfaces were sometimes twice as large as the modern human average. Discovery of a pelvis from Kebara, in Israel, suggested that the way the body was carried was quite different, as the spinal column was more deeply indented into the back than in ourselves. Yet, from the same site, a hyoid bone, which attaches to the voice box, suggested that the movement of the throat, tongue, and voice box in producing speech was similar to ours, despite the greater distance in Neandertals between the neck and the back of the throat.

In addition, Neandertals, like other cold-adapted animals, had very large deep chests and short lower arms and legs, to better

conserve body heat. New studies of the face suggested that the very long projecting face and huge, broad nose were distinctive; other large-faced archaics from Africa or East Asia had shorter, flatter faces, with more angulated cheek bones. The distinctions of Neandertals from other archaics appeared quite striking, and resulted in most scholars excluding fossils formerly grouped as "Neandertaloids" from this category. Neandertal morphology was peculiar: you would definitely notice it even on the N.Y. subway!

Are there any transitional fossils? In Africa, several fossils are intermediate between archaics and moderns. Even the early moderns themselves at Klasies River Mouth, for example, are described by Trinkaus as more robust in their limbs than Cro-Magnons of Europe. In Europe, the argument is very heated. Those who argue for interbreeding between Cro-Magnons and Neandertals (Wolpoff and Smith), or even for an indigenous evolution from Neandertals to Cro-Magnons (Brace), point to the less extreme characteristics of some later Neandertals, or to the presence of significant brow ridges and rugged large faces along with definite chins at modern human sites in central Europe.

Transitional or even archaic Homo sapiens fossils from Asia are quite rare; most of the best specimens from China have not been well-published in an accessible format. Regional continuities in Asia, however, are striking to proponents of the multiregional evolution theory (Wolpoff, Wu, Thorne, and Pope). If the earliest modern Asians came from Africa, why do the earliest ones we find already have the flat upper faces, and dental characteristics of Asians today? Why are the earlier archaic Asians also flat-faced? "Out of Africa" theorists (Stringer) argue that the flat faces and other features are either primitive features retained in that population, or simply adaptations to the cold dry Asian climate that are favored each time a new human population reaches the area.

REVOLUTION OR EVOLUTION?

In his recent book, *The Last Chimpanzee*, Jared Diamond argues that modern humans became fully modern in their behavior rather suddenly about 40,000 years ago. This "great leap forward" or "human revolution" is largely based on the perspective from Europe, where major changes in technology (blade and bone tools); economic strategies (ambush hunting, fishing); size of social networks; and symbolic activities (art) occurred over a few thousand years as the Cro-Magnons replaced the Neandertals.

The recovery of new sites, fossils and data dating to between 250,000 and 40,000 has accelerated since the 1960's. Even with the limited exploration of Africa to date, it seems that, like modern human facial shape, some of the modern behaviors of the "human revolution" appear well before 40,000 years ago in Africa. While the later Neandertals ran down their prey and stabbed it with sharpened sticks or an occasional stone-tipped spear, central and eastern Africans hafted small delicate stone points onto spear- or even arrow-shafts; made stone blades, backed triangles or crescents, barbed bone points, and other bone tools; engaged in regular fishing and ambush hunting; ground their food (and some pigments) with grindstones; scratched designs on ostrich eggshell fragments; and traded precious raw materials such as obsidian over more than 500 miles. Like the later Neandertals, the early modern humans also buried their dead with grave goods.

By 50-40,000 years ago, new data show that Africans wore beads of ostrich eggshell, and engaged in organized mining of precious raw materials. Elsewhere, modern humans had used boats to reach Australia, New Guinea, and New Caledonia, where rock art has been dated to 32,000 years ago. Outside of Europe, the "great leap forward" began earlier and was more like a slow jog, with occasional detours and backward movements.

BUT WERE THE CRO-MAGNONS AFRICAN?

Although modern humans appear to have developed earlier in Africa, physical anthropology and archaeology do not demonstrate migration of modern humans to Europe. Despite earlier claims for the fossils from Grimaldi, Italy, African characteristics such as nose shape and width, wide distance between the eyes, and forward projection of the mouth, do not occur in the early Europeans. Grimaldi itself is not only not "African" but is considerably later in time than the earliest modern Europeans--new dates suggest an age of less than 28,000 years. According to recent dates on archaeological sites, the Aurignacian culture of the Cro-magnons appears first in central and southeastern Europe, just before 40,000 BP, spreading to near Barcelona, Spain by ca. 38,000 and finally to France and Germany by 34,000. Southern Spain, near the straits of Gibraltar, is one of the last areas to make the transition from the Mousterian culture of Neandertals--archaeology does not suggest an invasion via this route. The big blades, thick scrapers, and bone points of the Aurignacian are quite unlike anything from the preceding Mousterian culture of Neandertals, so it was assumed that it came into Europe from outside. Yet there is nothing "outside" in this time range, either in the Near East or in north Africa, from which the Aurignacian can be derived. In much of Africa and the Near East, at ca. 40,000, the stone industries were characterized by finely-made small blades, many with narrow points created by blunting or battering the sides, or by small points with a tang or projection for hafting. The Aurignacian does show up in the Near East, but recent dates suggest that this is only after it is well-established in Europe, at about 34,000. The Near East may have been a migration corridor, but it was open in both directions.



CHEWING STRESS AND BROWRIDGES

CAN THIS CONTROVERSY BE RESOLVED?

The controversy over modern human origins is particularly heated because it concerns ourselves and our most recent history. The argument has been widely featured in the public media: *Time*, *Newsweek*, *The New York Times*, and at least two television specials on PBS. Unlike the controversy over earlier phases of human evolution, many of the voices expressed in these pieces are the voices of non-scientists, who argue that up to now, Eurocentric bias has suppressed recognition of our "true" heritage. While the discoveries of the past two decades have gone far towards demonstrating the priority of continents other than Europe in the evolution of modern humans, the data also suggest that this was not a simple event of evolution followed by migration in one direction. Replacement of earlier populations may not have been total. More and better dates and data, particularly from regions such as western Asia, Turkey and the Balkans, as well as Africa, may go far towards clarifying the complex interactions involved in this transition.

(continued on next page)

Excellent discussions on this topic can be found in recent journals:

Discover - September '92.

Scientific American - April '92, October '91, December '90.

Science - February, 7, April 3, May 29, June 12, 1992; August 23, 1991; March 11, 1988.

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A bibliography on human evolution is available from the Anthropology Outreach and Public Information Office, NHB MRC 112, Smithsonian Institution, Washington, DC 20560.

Alison S. Brooks

* * *

CATASTROPHE IN RHYME

by I. Doolittle Wright

*I repeat my perennial scold,
Our profession is shaped by the mold,
Of the covert view,
That the roots of the new,
Are not to be found in the old.*

*The source of the general rule,
Transmitted by Marcellin Boule,
That Neanderthal,
Had no offspring at all,
Is the Neocatastrophist School.*

*But it seems unaccountably strange,
To deny that the strength of a range
Of natural forces
Suffice as the sources
That shape biological change.*

*There's something completely absurd,
In the view that's been recently heard;
The claim that stasis,
Can serve as the basis,
Of all that has ever occurred.*

*Mechanics are never detected,
In the popular view that's projected;
Since all that works,
Is change by jerks;
And Darwin is flatly rejected.*

*For that's how most scholars behave,
And it's easy enough to be brave,
When objection at most,
Is the groan of the ghost,
As it turns in its Westminster grave.*

*But if Darwin were with us today,
Consider just what he might say;
'Examine the strata,
Containing the data,
And use the ensuing array.'*

*Now ponder that primitive brood,
Eating their undercooked food;
The ones that are early,
Are rugged and burly,
With tools that are simple and crude.*

*Then look at what happens with time,
As a result of the technical climb.
The reduction of stress,
Means there's more of the less,
With moderns emerging sublime.*

*If we stick to the fossils involved,
The problem is easily solved;
Since Neanderthal form,
Can serve as the norm,
From which our species evolved.*

[From C. Loring Brace, "Modern Human Origins: Narrow Focus or Broad Spectrum." The David Skomp Distinguished Lectures in Anthropology, Delivered April 16, 1992, Indiana University.]

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FORENSIC SLEUTHS SOLVE MYSTERIES

Few people are aware that physical anthropologists serve as regular consultants to the FBI Laboratories in Washington, D.C. or that they assist medical and law enforcement personnel throughout the country in forensic cases by examining the remains of unidentified deceased persons, especially when the remains have been partially or completely skeletonized.

Smithsonian forensic anthropologists have helped develop many of the techniques used to identify and study the dead and have participated in some of the most notorious cases of this century, including the identification of victims of serial killers. The first article, "Getting Away with Murder--Almost" presents two case studies taken from a new book by Douglas Ubelaker and writer Henry Scammel titled

Bones: A Forensic Detective's Casebook that details the work of forensic anthropologists. Forensic techniques are described in the second article, "Tales Bones Tell" by Robert Mann, formerly with the Smithsonian's Department of Anthropology.

GETTING AWAY WITH MURDER --ALMOST

Before the value of the forensic anthropologist's insight and experience gained its present wide acceptance in the legal process, there is no doubt that more people got away with murder. A good example is the onetime insurance salesman in Yakima, Washington, who beat his wife to death with a hammer in 1975, set up the killing to look like an accident, and escaped arrest for almost a decade.



On the face of it, he was the kind of killer one would expect to be caught a lot earlier. He would put away half a quart of scotch and a six-pack of beer in a typical day. He advertised his intentions in advance to at least one of his numerous girlfriends. His former in-laws were so certain he had murdered his wife that they went to the expense of an exhumation, private autopsies, and an appeal to the district attorney to reopen the case based on evidence that contradicted the official cause of death. His second wife divorced him and told the police he had boasted to her of the crime; she even recited in detail how he had done it. For all that, it took a special petition to the governor by the dead woman's sister to bring the man to trial.

According to his second wife's court testimony, the killer believed he was free for so long because the cops were stupid. Anybody can get away with murder, he said, if they just commit the crime that plausibly can be explained as an accident. He hit his wife three times on the head with a claw hammer because sideways it made the same kind of impact mark as a horse-shoe, placed her body in a horse stall behind their house, then drove down to the local bakery where he paid for a bag of assorted donuts by check. He told the police that when he returned home and didn't find his wife in the house, something prodded him to look in the barn. Imagine his horror when he found she had been kicked.

He thought she was still alive when he called an ambulance--a nice touch. One of his children said he cried for a week.

The killer was wrong about the police being stupid. They did what they were supposed to do, but sometimes that is not enough protection against a good lie and a killer's good luck. Sheriff's deputies recorded a detailed report of what they were told and what they found, investigated the murder scene, took pictures, and removed the body.

The medical examiner was not stupid either, but the state did not require forensic training for physicians who certify accidental death. The coroner did what he could, considering his lack of training and

experience. He found a gaping laceration in the right temporal parietal area exposing a depressed skull fracture, and a similar injury with a broader fracture on the opposite side of the head. He removed the scalp and then the top of the skull, measured and described the two depressed fractures, and reported in detail on the linear fractures connecting them. The coroner compared these injuries to those described in the story he had heard; then, with a detective sergeant, he returned to examine the horse stall. Two feet above the floor, directly adjacent to a wall which was still stained with the brush marks of the victim's bloody hair, they found a timber with a projection on the end which corresponded to the injury in her right temple. The coroner wrote in his report, "The blood stains indicated that the deceased's head had been moving in a direction away from the timber which would be logical as a result of her falling forward after being kicked against the timber." Under Manner of Death he entered, "Being kicked by a horse."

A few months later, the killer married one of his girlfriends, to whom he had described his crime. It is hard to imagine that a union based on such a bond would ever end, but when it did, several years later, there was an unpleasant agreement over who got the furniture. As a general rule, it is imprudent to argue too vehemently with an adversary you know is holding aces. She settled the furniture issue by going to the police with the story of the murder.

Fortunately, there was a huge difference between the first medical examination and the studies of the remains that preceded the formal trial. This time the evidence was reviewed by experts: three forensic pathologists, two forensic anthropologists, and detectives trained in reading the evidence of murder. These experts included Douglas Ubelaker, a Smithsonian consultant in forensic anthropology to the FBI Laboratories in Washington, D.C.

Ubelaker reported two principal points of focus on the skull that produced separate, unconnected fracture lines that

contradicted the observations of the original examiner and pointed to the possibility of a different type of event than the one described earlier. The object producing the puncture mark at the smaller site was sharper than the other, and it produced an ovoid hole measuring 14 x 21 mm with a sharp upper margin and a crushed, flattened lower margin. The pattern suggested the trauma was inflicted at this site from above rather than from below or from the side.

The killer had allowed the murder weapon to turn in his hand before delivering that particular blow; an ovoid hole of that type and size does not come from an object resembling a horse shoe, *but is the signature imprint of a hammerhead*. A second forensic anthropologist even computed the exact angle of the hammer's attack and the force of the blow. A pathologist demonstrated it was physically impossible for the body to have contorted in such a way that the puncture wound could have been caused by the knob on the beam. Finally, another specialist demonstrated that the swipes of bloody hair on the wall were not the consequence of a kick, but were painted there by hair that had time to become fully saturated and had brushed against the wall, not once but twice, as the dying or dead woman's body was being carefully lowered by the killer into its position on the floor of the stall.

In his summation, the prosecutor addressed the essence of the difference between the first and second examination. He pointed out that the first medical examiner did what many physicians, not forensic specialists, would have done under similar circumstances. He took what appeared on the surface to be a reasonable explanation, "a horse kick killed her," and did his autopsy and subsequent examination of the scene with that in mind. He made a fatal mistake: he assumed he knew what had happened and then tried to fit the facts into those assumptions. Forensic pathologists are trained not to make that mistake.

Part of a detective's job is to include any relevant information, even speculative, that might be of use to the examiner. Like the

examiner, the detective is expected to remain neutral, not anticipating the result of such a search. Even when the policeman is careful to express no such anticipation, there is a risk the examiner will find more clues in the letter accompanying the examination request than is in evidence from the remains. A letter accompanying the skeletal remains of a young girl from Swansea, Massachusetts, offers a case in point.

The identity of the victim had already been established, the letter said, as a young woman who had disappeared two years before. "She was age 16 at the time. She had run away from home three times already and had returned. She was a known drug (marijuana) user and had been in trouble with the law." The letter went on to describe two specific physical characteristics by which the identity might be confirmed--a chipped mandibular front tooth and an old injury above the left eye from a rock thrown up by a lawn mower blade when she was only two. In addition to the positive ID, the letter asked for "possible cause of death," adding at the end, "Several weeks before her disappearance, her mother stated that she had been threatened with bodily harm by her boyfriend."

On the face of it, the detective did not appear to express a bias toward either possible cause of death: a drug overdose or violence at the hands of her boyfriend. But it was clear, later, that police in Massachusetts were leaning heavily toward the probability she had died of an OD. The detective who sent the remains to the FBI was apparently a better guesser than most of his peers; he addressed his letter to the Microscopic Analysis Laboratory. After a body has been skeletonized, a microscope does not reveal much information about drug use, but it often can reveal insights as to possible acts of violence.

A forensic examination by Ubelaker began with sex, age, race, and time since death, all of which were consistent with the information on the supposed victim. Ubelaker confirmed a chip out of the buccal surface of the right central mandibular incisor.

Despite the tremendous growth and remodelling the face undergoes between the ages of two and sixteen, the old fracture from the lawn mower incident, long since healed, was still visible on the frontal bone above the left eye orbit. Without reasonably current medical x-rays or dental records for comparison, neither was positive proof of identity, but, added to other evidence recovered at the site, they reinforced a strong circumstantial case that these were the remains of the missing girl.

A first sign of trauma was on the first bone examined; the left twelfth rib bore a 2 mm incision produced by a knife or a knife-like instrument. There was another incision, this time 12 mm in length, on the next rib. Because it had been two years since the girl's disappearance and presumed death, her skeleton had largely disarticulated. But as Ubelaker examined bone after bone, he kept encountering evidence of brutal stabbing.

The victim had been stabbed just below the right knee and three times more above and below the left knee. She had been stabbed once in each buttock and in the groin. There were seven separate stab marks scattered around the back, four more in the nape of the neck, and one in the left side of the neck. There was a total of ten more such wounds in the head. Some of the incisions in the skull were so violent they had bent back the bone. Ordinarily wounds that result from such obvious frenzy are grouped in a particular area, but in this case they appeared to travel the full length of the body. Ubelaker still remembers the surprise of the police when he called to tell them their case of suspected drug overdose was in fact a violent murder.

A few weeks after Ubelaker's examination an important new piece of evidence was recovered near the murder site as a consequence of his report. A man who lived in the area came forward after reading in the newspaper that the death had been by stabbing. Only a short distance from where the skeleton had been discovered, he said he had found an object he now realized as a likely murder weapon. The object was a folding trench knife with brass knuckles on

the handle and the word "Assassin" written on the eight-inch blade. By matching the curve of the blade exactly with some of the incisions in the bone, Ubelaker was able to prove the knife could have been the murder weapon and to demonstrate that the blade likely had become bent in the fury of the attack.

Matching the murder weapon to the signatures it had left on the skeleton was only part of the necessary equation, however, and the case remained unsolved for another two years. Finally, one of the neighborhood boys went to the police. He said the killer was a friend from high school, and that he had shared the details of what had happened the day of the murder. One of those details was that the folding blade of the knife had snapped shut against the killer's thumb during the attack, and that night he had gone to a walk-in medical center for stitches. Police verified that the suspect had indeed received treatment on the night of the date the girl disappeared. They finally had enough evidence to arrest the boyfriend--who had been suspected by the victim's mother from the beginning.

When Ubelaker flew up to Massachusetts to testify at the trial, he thought how unlikely it was that this murder should have gone so long unsolved. Totally unplanned, it had been carried out by a heavily drugged young man in a rage, the body left out in the open where anyone could have tripped over it, the murder weapon recovered within just a few yards of the corpse, and the perpetrator identified as a prime suspect even while the case was nothing more than a missing person. These thoughts were reinforced when Ubelaker arrived at the courthouse. During the trial he learned that the killer had confided his crime to at least six other boys in the weeks following the murder, yet five years passed before a single one of them came forward.

Strangest of all was what the boyfriend/murderer recalled of events at the walk-in medical center, where he received stitches in his hand. "One of the nurses told him, 'It

looks like you killed somebody from all the blood."

Douglas Ubelaker
Henry Scammell

TALES BONES TELL

In cases of homicide, mass disaster, missing persons, and death from undetermined or suspicious causes, law enforcement personnel often turn to scientists. Scientists in diverse fields (physical anthropology, botany, entomology, biochemistry, and sociocultural specialties such as costume design and analysis) apply their expertise to examining the human skeleton and related artifacts to illuminate the identification of remains or the circumstances surrounding a death. Physical or forensic anthropologists have participated in some of the most publicized cases of the century, including the identification of victims of serial killers such as Ted Bundy, the Green River Killer, Henry Lee Lucas, and Jeffrey Dahmer; of soldiers killed in Korea, Vietnam or Operation Desert Storm; and the solution of mysteries surrounding such figures as the Texas gunfighter William P. Longley and the kidnapped Lindbergh baby.

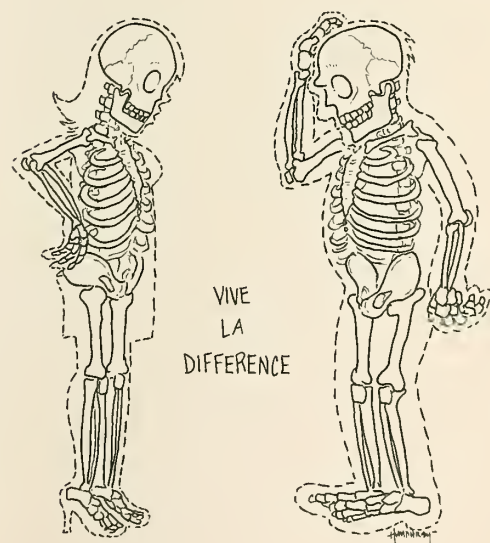
The forensic anthropologist can usually determine age at death, race, sex, and stature; detect any indications of trauma, disease, and occupational or habitual activities; and estimate elapsed time since death. The best sources--often the only sources--of such information are the skeleton and teeth.

When a complete skeleton or even a single bone is found, the first question is whether it is human, nonhuman animal, or other (e.g., burned gourd resembling a human skull). As human and animal bones differ in texture, density, shape, and size, visual examination quickly provides an answer. Should human and animal bones be present, they are separated, and the number of individuals represented by the human bones determined. Next the bones are examined for evidence of stabbing, bullet wounds, or butchering (i.e., disarticulation).

Forensic anthropologists examine human skeletal material using a variety of techniques to obtain many kinds of data. Determination of sex, race, age, stature, date and cause of death, and occupational or habitual activities all help in the quest for positive personal identification.

Determination of Sex

The most reliable osteological (bony) indications of sex are the pelvis, skull, and mandible, and the size of the long bones and joints. The female pelvic girdle consists of two hip bones and a sacrum that have a number of bony features differing from those of a male. For example, when the two hip bones of an adult female are put together with the sacrum and viewed from above, the birth opening is circular and large; female hip bones have a more outward flare than those of males; and the female pelvis has a broader notch for the sciatic nerve and a wider angle where the two pubic bones, which are long and rectangular, come together. These structural traits facilitate the process of giving birth. In contrast, the male pelvis is usually larger and more muscle marked than the female. The cavity viewed from above is heart-



shaped rather than circular and the pubic bones are short and triangular.

Like the pelvis, the male skull is typically larger and more muscle marked than that of the female. In addition, males exhibit larger mastoid processes (behind the ears), a sloping forehead with more developed browridges, blunt upper margins of the eye orbits, in contrast to the sharp orbital rims of females, and a larger lower jaw with a more squared chin.

Racial Affiliation

Racial affiliation is difficult to determine even in the living. Human populations, or even human families who are closely related genetically, are extremely variable. In addition, humans have always been quite mobile, and interbreeding among different populations is common throughout the world. Many of the characteristics used by the public to determine "race", such as a particular skin color or nose shape, actually occur throughout the world in unrelated populations. The concepts "Black," "White," "Asian," or "Native American," commonly used in the US, are social constructs, whose boundaries are arbitrary and bear little relationship to biological affinities. In examining skeletal material, the forensic anthropologist faces a further dilemma. Skeletal attributes more common in particular populations may not correspond at all to the surface characteristics such as skin color or hair form that are used to suggest ancestry among the living.

In the order of most to least reliable, the skeletal indicators of racial affiliation--people of African descent, people of European descent, and East Asians, which include Native Americans, Eskimos, Chinese, Japanese, and other Asians--are most apparent in facial structure, skull, teeth, and thigh bone. Anthropologists assess these attributes on a scale ranging from mild to prominent. For example, many people of African descent have short, wide nasal openings and grooves at the base of the bony portion of the nose in contrast to many people of European descent, who have narrow, long nasal openings and a ridge at the base of the nose. When viewed

from the front, the faces of "Europeans" tend to be narrow and long, and those of "Africans" tend to be wider and shorter; and those of "Asians" may range from flat to concave.

In regard to teeth, "Africans" often have complicated or "wrinkled" molar cusp patterns. Two dental traits common to many "Asians" are an edge-to-edge bite and shovel-shaped incisors. Nearly all Native Americans who lived before about AD 1900, and many extant Asian groups, have severely worn teeth.

Determination of Age

The age of a person less than 18 years old can be determined most accurately by the stage of dental development, as the teeth develop in a predictable sequence making possible an age estimate generally accurate to within six months.

The size and stage of development of the long bones in the legs and arms also provide information for estimating the age of a subadult to within about 16 months. The maximum length of a single bone can be obtained and compared to bone lengths based on clinical growth standards; the resulting age estimate is accurate to within a few months.

Whereas age estimates of children are based on the stage of development of the skeleton and teeth, those of adults are derived from advanced growth and degenerative changes. Thus indicators of adult age include the stages of sutural closure in the skull's cranial vault and palate and structural changes of the pelvis. Equally important indicators are degenerative changes, such as arthritis of the spine and joints, and a general decrease in bone mass, a condition known as osteoporosis.

Determination of Stature

Stature or height can be determined for a child or an adult if there is at least one complete or nearly complete long bone of the arm (humerus, radius, or ulna) or leg

(continued on p. 14)

SUMMER FIELDWORK OPPORTUNITIES

Looking for adventure? For an opportunity to acquire new skills? Become a member of an archeological excavation or a scientific expedition in the United States or abroad and learn about another culture, past or present.

SMITHSONIAN PROGRAMS

Anthropology-related summer projects offered by Smithsonian Research Expeditions are:

Crow Culture: Writing a Contemporary Ethnography. The first team will record everyday life on Crow Agency in Montana (April 14-20); the second team will document activities at the annual pow wow, Crow Fair (August 18-24).

Assisting the North American Indian Program. Planning for the new Native Peoples of North America Hall requires three teams: script verification (March 7-20), photographic documentation (May 9-22), and research for the information guide (July 11-24).

The Him-Dak Museum. Volunteers will create a native garden in cooperation with The Him-Dak, a tribally operated ecomuseum on the Ak-Chin Indian Community in Maricopa, AZ (May 9-15).

Polynesian Barkcloth: Preserving a Tradition. Two teams of volunteers are needed to assist in the conservation of Polynesian barkcloth in the Department of Anthropology's collections. Tours of conservation labs and lectures will give volunteers additional knowledge.

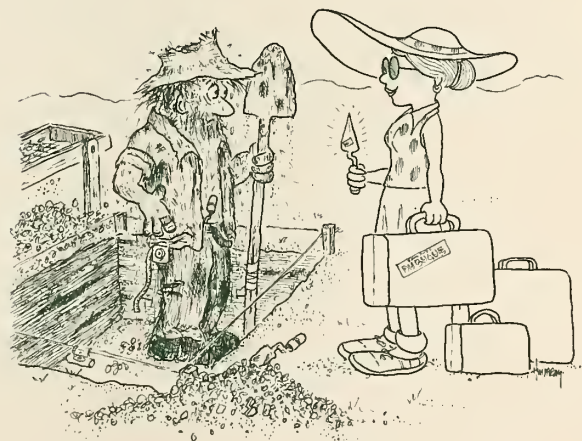
For further information, write or call Smithsonian Research Expeditions, 490 L'Enfant Plaza, S.W., Suite 4210, Washington, DC 22024; (202) 287-3210.

Office of Elementary and Secondary Education (OESE)

OESE offers week-long courses in the sciences, arts, and humanities with in-service credit for teachers, K-12, from Maryland, the District of Columbia, and Virginia. Call Clare Cuddy at (202) 357-2404 for a registration form after May 1.

ORGANIZATIONS TO CONTACT

Anthropology departments at local universities and colleges, state historic preservation offices, and state archeological societies organize local archeological excavations and frequently accept volunteers with no previous fieldwork experience. The Archaeological Institute of America (AIA) offers a listing of state archeologists as part of its yearly field school listing for the U.S. and abroad. The cost, including shipping and handling, is \$11.50 for members and \$13.50 for non-members. For each additional copy ordered, add 50 cents for shipping. Write: Kendall-Hunt Publishing Co., Order Dept., 2460 Kerper Blvd., Dubuque, IA 52001; (800) 338-5578. *Archaeology* magazine, published by the AIA, features an archeo-



logy travel guide to sites open to the public in the Old World (March/April issue) and the New World (May/June issue). A field school listing is also available from the American Anthropological Association for \$5.00 for members and \$7.00 for non-members, with a self-addressed envelope with 56 cents postage. Write: AAA, 1703 New Hampshire Ave., N.W., Washington, D.C. 20009 or call (202) 232-8800.

Several organizations offer volunteer public participation in worldwide research expeditions. Many of these organizations, listed below are non-profit and participation fees may be treated as tax-deductible contributions.

University Research Expeditions Program

University of California
2223 Fulton, 4th Floor
Berkeley, CA 94720
(510) 642-6586

Earthwatch

680 Mount Auburn St., Box 403,
Watertown, MA 02272.
(617) 926-8200
(Scholarships available for teachers)

CEDAM International

(CEDAM stands for Conservation, Education, Diving, Archeology, Museums)
Fox Road
Croton-on-Hudson, NY 10520
(914) 271-5365

SELECTED FIELD SCHOOLS

Syracuse University offers summer and semester programs in Australia to study Australian cultures, native language, society, and ecology. Write: Syracuse University, Division of International Programs Abroad, 119 Euclid Ave., Syracuse, NY 13224; 1-800-235-3472.

Summer Abroad through World Learning, Inc., the U.S. Experiment in International Living, offers students and adults opportunities to learn another culture through homestay, language-study, and ecologically-focused programs. Write: World Learning, Inc., The U.S. Experiment in

International Living, P.O. Box 676, Kipling Rd., Brattleboro, VT 50302-0676; (802) 258-3173.

Picuris Pueblo in the Sangre de Cristo Mountains, New Mexico, is the focus of an ethnographic field school (July 25-August 15) sponsored by Middlesex County College. In addition to three weeks of instruction on the southwest cultures and in field methods, students will live with Pueblo families and participate in village life, including pottery making, adobe construction and feast day. Write: Dr. Diane Z. Wilhelm, Middlesex County College, 155 Mill Road, Box 3050, Edison, NJ 08818-3050; or call (908) 548-6000 ext. 3099.

High school students and teachers are invited to excavate, for one to four weeks, a ceremonial mound at Moundville Archaeological Park, the site of a Mississippian culture (A.D. 1,000 to 1,500). Write: Melissa Moon, Museum Expeditions, Alabama Museum of Natural History, Box 870340, Tuscaloosa, AL 35487-0340; or call (205) 348-2040.

Archeological Field School in Bermuda, sponsored by The College of William and Mary, July 5-August 14, will focus on early 17th century forts on Castle Island and rural domestic sites in Hog Bay Park. Application deadline is April 1. Field School director is Norman F. Barka. Write: Dr. Ann M. Moore, Programs Abroad, Reves Center for International Studies, College of William and Mary, P.O. Box 8795, Williamsburg, VA 23187-8795, or call (804) 221-3594; FAX (804) 221-3597.

Crow Canyon Archaeological Center is a non-profit institution specializing in Southwestern archeological research and education. The Adult Research Program: Ethnobotany, consisting of week-long sessions, is conducted from the last week of May through the second week of October. The High School Field School takes place from June 27 to July 24. The Teachers' Workshop is scheduled for July 31-August 8. Transferable academic credit is available for these programs. Archaeological and cultural programs to the Southwest and workshops led by American Indians are also

offered. Write or call: Crow Canyon Archaeological Center, 23390 County Road K, Cortez, CO 81321; (800) 422-8975, (303) 565-8975.

Special seven-day Archeological Field Seminars on the Four Corners Region, led by Southwestern archeologists, will take place from May through October. Write or call: Dr. Stuart Struever or Dr. Stephen Lekson, Crow Canyon Archaeological Center, 1777 South Harrison St., Suite 815, Denver, CO 80210; (303) 759-9212.

Expedition to the Negev desert in Israel (July 9 to August 8) will involve excavation of a Byzantine church and a Middle Bronze Age structure, with one week of touring. Write or call the Prof. Steven Derfler, Department of Religion, Hamlin University, St. Paul, MN 55104; (612) 641-2392; FAX, 641-2956.

Center for American Archeology, Kampsville Archeological Center conducts educational research programs for junior and senior high school students, college students, and the non-professional, and workshops for teachers. Scholarships are available for American Indian students. Write: Admissions Office, Kampsville Archeological Center, Kampsville, IL 62053, or call (618) 653-4316.

Drew University in West Africa offers a comprehensive study of West African art and architecture in Mali and Cote d'Ivoire. In Mali (July 4-24), students will be introduced to West African cultures through lectures and travel. In the Cote d'Ivoire (July 22-August 21), students will learn through apprenticeships about West African arts and crafts and archaeology. Write: Off-Campus Program Office, BC-115, Drew University, Madison, NJ 07940-4036; (201) 408-3438.

Northwestern University's Ethnographic Field School (June 21-August 14) is an opportunity to learn about the Navajo or Hispanic cultures of New Mexico and Arizona by designing independent research projects. Write or call: Professor Oswald Werner, Department of Anthropology, Northwestern University, Evanston, IL

60208; (708) 491-5402 or (708) 328-4012, evenings.

Historical Archaeology Field School at Historic St. Mary's City, Maryland will focus this season on an unknown brick foundation that may be a 17th century Jesuit school. The ten-week intensive field school begins June 10. The public can volunteer to excavate throughout the summer and conduct lab work in the winter. Write: Dr. Tim Riordan, Archaeology Program, Department of Research, HSMC, P.O. Box 39, St. Mary's City, MD 20686, or call (301) 862-0974.

Fieldtrip to Mexico (May 7-25) is designed for understanding the geography and cultures, past and present, of Mexico. Write: Isabelle Champlin, University of Pittsburgh at Bradford, 300 Campus Dr., Bradford, PA 16701-2898; or call (814) 362-7500.

Quarai Pueblo field season (May 31-July 11) will explore ceramic production and trade relations between southern Plains hunter-gatherers and eastern Puebloan farmers. Application deadline: March 30. Write: Dr. Katherine A. Spielmann, Department of Anthropology, Arizona State University, Tempe, AZ 85287-2402; (602) 965-6213.

Human Origins and Prehistory in Kenya: The Koobi Fora Field School (July 18-August 28), offered by Harvard University Summer School and the National Museums of Kenya, introduces the wealth of paleoanthropological evidence at Koobi Fora and field methods in early human research. Write or call: Dr. Harry V. Merrick, Koobi Fora Field School, Harvard Summer School, 20 Garden St., Cambridge, MA 02138, (203) 481-0674 or (617) 495-2921.

Salt Center for Documentary Field Studies will document the tradition and change in Maine among American Indians, fishermen, store keepers, mill workers, farmers, and artisans. Write Salt Center for Documentary Field Studies, 19 Pine St., P.O. Box 4077, Portland, ME 04101, or call (207) 761-0660.

ANTHROPOLOGY AND MULTICULTURALISM

[Editor's Note: The following article on Anthropology and Multiculturalism is composed of two sections: an Introduction by Ruth O. Selig and excerpts from "Multiculturalism, Cultural Relativism, and Competing Perspectives on the Encounter," by Lawrence B. Breitborde, published in the March 1992 issue of *Social Education*.]

Introduction

At an informal party, among strangers, a majority of non-Indians try to make talk with whoever will listen. They feel compelled to act, to make contact, to cover their uneasiness with talk, with action. Traditional Indians, on the other hand, will stand or sit quietly, saying nothing, watching, learning, trying to discover what is expected of them, and speaking only when they are sure of themselves. White people find their place by active experimentation, Indians by quiet alertness. One Indian said about a white acquaintance, "He'd rather be wrong than silent" (*Teaching the Native American*, edited by Hap Gilliland, et. al., 1988).

Jose Ybarra and Edmund Jones are at the same party and it is important for them to establish a cordial relationship for business reasons. Each is trying to be warm and friendly, yet they will part with mutual distrust and their business transaction will probably fall through. Jose, in Latin fashion, moved closer and closer to Edmund as they spoke, and this movement was miscommunicated as pushiness to Edmund, who kept backing away from this intimacy, and this was miscommunicated to Jose as coldness. The silent languages of Latin and English cultures are more difficult to learn than their spoken languages ("The Sounds of Silence" by Edward and Mildred Hall, 1971).

During this past year, several anthropologists have addressed the issues of "Cultural

Diversity" and "Multiculturalism," and the role anthropology should be playing in helping students and teachers face the challenges of an increasingly diverse and changing world. (See "Points of View: Multiculturalism and Museums," by Ruth O. Selig in *Anthro.Notes*, Fall 1992). Anthropology is not a central player in the growing debate over issues of diversity, equity, and multiculturalism in schools, or in universities as Richard J. Perry points out in his article, "Why do Multiculturalists Ignore Anthropologists." (Richard J. Perry, *The Chronicle of Higher Education*, March 4, 1992: A52). As Perry wryly states, "most anthropologists hope that we can play a part. But many of us are taken aback by our empty dance cards."

As Perry says, the issues that appear central to educators concerned with multiculturalism--"the concept of culture, cultural relativism, the interpretation of other systems of thought, and so on--have been central to anthropology throughout this century," yet anthropologists are scarcely included in the debates on university campuses across the nation. In addition, anthropologists find some of the approaches of the new multiculturalists questionable because they are based on a simplistic concept of culture and a "visceral" approach to understanding other cultures. "They communicate a sense that one can bypass tedious scholarly discussions of kinship systems, economic patterns, and food-getting strategies of "others" and go straight for what it 'feels like' to be one of them."

Perry accuses the new multiculturalists of naivete, particularly in dealing with cultural relativism that is commonly confused with moral relativism. "Cultural relativism does not...mean that all human behavior merits approval. It only means that to understand what people do, it is more useful to ask why they do it than to decide whether or not they should." Four months after Perry's article, the President of the American Anthropological Association, Annette B. Weiner, wrote a second piece for *The Chronicle of Higher Education* titled "Anthropology's Lessons for Cultural Diversity" (July 22, 1992:B2). Like Perry, Weiner decries the fact that "anthro-

pology's insights into studying and representing multiple cultural identities... are ignored by most participants in today's debates. As the multicultural controversy has gained increasing public attention, anthropologists have remained silent--perhaps discouraged by the simplistic assumptions about cultural identity promulgated by those on the right and the far left."

Weiner's article goes on to describe the anthropological understanding of culture as it developed through time, and in particular Franz Boas' contributions and battles in the early 20th century to combat ethnocentrism and racism. Boas strove to foster respect for cultural diversity in an atmosphere of hostility and determination to use public schooling to "enforce assimilation of ethnic minorities into the dominant American culture." Weiner's article ends with a clarion call to anthropologists:

It is time for anthropologists to help other scholars redefine multiculturalism as a movement that finally takes us beyond the ethnocentrism and fear that so deeply shaped the history of this country. The challenge remains--as it was in the 19th century--to foster multiple ways of understanding cultural differences, thus creating a more equitable society without feeding the forces of racism and ethnocentrism once again.

In his article, Lawrence B. Breitborde considers at length the relevance of anthropology to the Quincentenary and to the debate over multiculturalism. Breitborde welcomes Columbus Day as a challenge for us "to help students--and ourselves--understand how groups separated by cultural differences can be integrated into a larger, coherent society." In the article, Breitborde offers an extended analysis of the concept of cultural relativism and thereby offers one concrete way in which anthropology can help teachers and students understand their increasingly diverse world.

Cultures are constantly being negotiated by the culture-bearers. Someone enculturated into one culture but operating in another is

often faced with two sets of cultural rules. He or she may choose one or the other set of rules, modify either so that it is even more different in order to emphasize his or her distinctiveness, negotiate a compromise between the two, or create something entirely new. While Breitborde's article does not address the complexity of cultures in contact in a multi-cultural nation such as the United States, *Anthro.Notes* editors plan to publish on this topic in the future.

Ruth O. Selig

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CULTURAL RELATIVISM

[Below are excerpts from "Multiculturalism, Cultural Relativism, and Competing Perspectives on the Encounter" by Lawrence B. Breitborde]

Anthropology . . . provides a perspective by which [we can] make sense of the world in which we live, including the cacophony of competing views, values and perceptions. What anthropology offers is **cultural relativism**, a concept that has fallen out of favor in recent years.

The classic definition of **cultural relativism** is that perspective by which any aspect of behavior or custom is understood in the context of the culture of which it is part. Its opposite is, of course, **ethnocentrism**, by

which one would use the values and standards of one's own culture to evaluate (erroneously) the meaning of behaviors or customs of another culture. Ethnocentrism distorts the meaning and function of a particular custom by detaching it artificially from its immediate cultural context. Cultural relativism allows us to see how particular customs, values and beliefs fit together, providing a sense of the world as a particular community understands it.

...Anthropology brought the world cultural relativism as a corrective to ethnocentrism. It has become a concept powerful in its simplicity: Understand the behavior of other groups in their own terms and from their own perspective.

Critics of Cultural Relativism

All along, there have been critics of this concept. The concern most widely known outside universities, and the one that has often brought cultural relativism into disfavor in the current debates on multiculturalism, is about values. When we consider behavior only in the context of the culture of which it is part, we discover time and again that there is almost always a clear sense, a rationale, for the behavior under scrutiny--that behaving makes sense in a culturally defined way. What might, from our own ethnocentric point of view, appear to be appalling, evil, or stupid, will, from the context of the culture of which it is part, make sense and may even meet the local definition of goodness and virtue. More alarming is the implication that no absolute definitions or standards exist or can exist for virtue and evil; in this sense, cultural relativism leads to moral bankruptcy.

Worse still, in assessing the value of other people's customs in terms of their own cultures, we simultaneously relativize our own customs and beliefs. Our ways of behaving, our values, and our notions of good and evil become just another way that a culture (this time, our own) has arranged things. In this view, everything is quite arbitrary. Anthropologists' gift to the world, cultural relativism, leads to a

recognition of the arbitrariness of all cultures and values.

These fears are confirmed outside of anthropology; social critics have not spared cultural relativism or its anthropological proponents from blame for the increasing social divisiveness and moral decay they see in our society. In his recent critique of higher school education in the United States, for example, Allan Bloom singles out anthropologists and relativism for special attention:

Sexual adventurers like Margaret Mead and others who found America too narrow told us that not only must we know other cultures and learn to respect them, but we could also profit from them. We could follow their lead and loosen up, liberating us from the opinion that our taboos are anything other than social constraints. We could go to the bazaar of cultures and find reinforcement for inclinations that are repressed by puritanical guilt feelings...(Bloom 1987, 33; cited in Klass 1991, 356).

...On-going controversies about multiculturalism in our schools add fuel to these fires. For some time, most anthropologists deployed the concept of cultural relativism in the study of cultures other than our own. The debate on multi-culturalism, however, brings cultural relativism to intra-societal questions. Now we must ask how our own society will be able to hang together given the myriad cultural differences that characterize the population. We are forced to confront the search for common moral standards and values among groups whose cultural differences seem at times greater than their cultural commonalities. We have lost the luxury of approaching, as relativists, groups of people far removed from us by oceans and time; we now are challenged to approach, as relativists, people with whom we share our society--our cities, our schools, and other public institutions--but with whom we may differ in appearance, language, deportment, tastes, and values.

There is a historical irony about this most recent dilemma of cultural relativism. In

its formulation in the early 20th century, cultural relativism was shaped by political events in U.S. society. To a great extent, cultural relativism was an intellectual response to "bad" science deployed to justify restrictive immigration. The anthropologist Franz Boas and his students promoted relativism as a "relativist and anti-racist 'social scientific orientation to human differences'" (Handler 1990, 253). These early anthropologists, actively engaged in establishing anthropology as an academic discipline, directed much of their energies to (if not receiving their inspiration from) events outside their universities:

Boasians repeatedly spoke out against racism and national chauvinism, and in favor of pluralism and intercultural tolerance--in the early 1920s when American xenophobia reached hysteric proportions, during the economic depression of the 1930s, and during World War II.... Boasian anthropologists took seriously the duty of the scholar and scientist to make specialized knowledge accessible to the citizens of a modern society (Handler 1990, 253).

Now, decades later, we see relativism skewed for contributing to divisiveness within our own society, even though it was originally developed and promoted as a tool toward the formation of a U.S. society that would integrate diverse cultural groups on the basis of mutual respect and understanding.

The Original Concept of Multiculturalism

The historical social mission pursued by the early proponents of cultural relativism suggests that it might be useful for us to return to the original concept. What we discover is that as cultural relativism gained acceptability outside anthropology and outside the academy, certain of its features became diluted and misunderstood. I would suggest that by sharpening our understanding and appreciation of cultural relativism, we can recognize its continuing promise for helping us cope effectively with the challenges of a culturally diverse U.S. society.

Two features of cultural relativism should be underscored in the context of today's debates.

First, although cultural relativism forces us to search for a logic of behaviors, values, or perceptions according to the cultural system of which they are a part, this embedding of custom within its own cultural context should not be interpreted as leading to the view that cultural differences are arbitrary....

Cultural relativism leads us to see that customs are *not* arbitrary. Through such thinking, we should be led to explore anew our own customs, which we often take for granted: how does a particular value of ours, or one of our customary practices, make sense in terms of its contribution to the larger organization of our lives, to the position we occupy in society, or to external ecological or material circumstances of our community? Making our own values relative--viewing them in the larger comparative context of other groups' values--has as much potential for strengthening our commitments to our own values as for weakening them. Cultural relativism leads us to recognize that values and beliefs are necessary parts of a larger, complex cultural whole on which the continued functioning of communities and societies, including our own, depends. Thus, cultural relativism and anthropology can lead to an affirmation of our own way of life.

Second, in encouraging us to see the world from another group's point of view--that is, to understand what behavior, values, and perceptions mean to those who engage in or espouse them--cultural relativism leads not to a moral nihilism, but to a respect for the need of every human community (including our own) to have a cultural system by which individual and societal values are defined.

Cultural relativism, and the anthropological search for the sense that behavior makes, helps us recognize the necessity for all peoples, including groups within our society, to have some *particular* culture, some *particular* values, beliefs, and customs.

This recognition provides a basis for understanding that the cultural diversity we are part of in contemporary United States is neither ephemeral nor arbitrary. Such diversity is inevitable, given both our historical knowledge of the demography of our citizenry and our anthropological understanding of the way in which human groups function....

The cultural diversity of the U. S. population is not arguable. It is real. Our question is how to prepare students to live in a society that will continue to be characterized by cultural differences. We simply cannot begin to address this question without cultural relativism. Cultural relativism is necessary to help understand the nature of these differences, to recognize that they are real, that they are likely to persist, and that they are functional. In these terms, we must use cultural relativism to help students learn to *cross* cultural boundaries. As the distinguished anthropologist of education, John Ogbu, has written (1990:428-429, emphasis added):

Education in the context of cultural diversity is a process in which teachers and schools bear the responsibility of acquiring knowledge of the cultures and languages of minority and other nonmainstream students and using such knowledge to educate the students from

these groups. The other part, which complements the responsibility of teachers and the schools, is the willingness and efforts of students from different cultural and language backgrounds to learn and use the language and culture of the schools. *These students...must be willing to cross cultural boundaries and this does not require them to give up their own cultures and languages...* A true cultural diversity that promotes the academic success of minority students and other marginal populations is one that permits them to cross cultural and language boundaries without feeling threatened.

Elasticity and Flexibility of our Humanity

Finally, cultural relativism underscores an essential feature of our being on which the struggle to maintain our society depends: the elasticity and flexibility of our humanity. We *can* understand another culture and experience a culturally alternative point of view without losing our own. In a world of competing viewpoints, and in classrooms where cultural diversity, improperly understood, can lead to divisiveness rather than understanding, we need to underscore the affirming nature of cultural relativism.

Lawrence B. Breitborde
Beloit College

* * * *

("Tales Bones Tell" continued from. p. 6)

(femur, tibia, or fibula). The measurements can then be compared with tables giving ranges in relation to sex, age, and so on.

Elapsed Time Since Death

To estimate the postmortem interval from death to discovery in weeks, months, or years is perhaps the most difficult aspect of forensic anthropology. During the first 24 hours after death, the human body goes through rigor mortis. Within a few days the

body begins to decompose, and the facial features become unrecognizable. Maggots are responsible for most of the process of reducing the body to a skeleton. When the body is not fully skeletonized, forensic anthropologists or entomologists can determine time since death by identifying the species of insects feeding on the body and determining its stage of development (maggots metamorphose from egg to the adult). If the remains are skeletonized, then the forensic anthropologist considers the color, cracking, and dryness of the bones and the absence of odor.

Trauma and Disease

Blunt and sharp force trauma in bone results from the impact of a brick, gunshot, or stabbing or slashing weapon. If the individual was fatally injured and died before the affected bone began to heal, the injury is designated perimortem, meaning that it occurred at or near the time of death. Examination of perimortem trauma can suggest the type of implement used and, often, the cause of death. Certain diseases such as cancer, syphilis, tuberculosis, and leprosy can also be identified in a skeleton because the disease alters the bone.

Evidence of Occupational or Habitual Activities

Bone responds to mechanical activity and exercise through growth. Conversely, insufficient activity and immobility lead to a decrease in bone mass. In persons who engage in repetitive activities for long periods of time, bones display adaptations to such activities. Overdevelopment can be seen, for example, in baseball pitchers (humerus), archers (scapula), blacksmiths (humerus), and dancers (feet). Other examples include dental grooves from holding nails between teeth (carpenters), chipped front teeth from opening bobby pins or safety pins, and stress fractures of toes in persons engaged in martial arts.

Positive Personal Identification

Frequently, the ultimate goal of a forensic investigation is to establish a positive identification. The police or medical authorities search files of missing persons for individuals who fit the physical description supplied by the anthropologist (for example, a white female, 25-30 years of age, who has been missing for one year). Facial photographs and dental and medical records, including radiographs (x-rays), of suspected victims are then requested from family, doctors, dentists, and hospitals. In the absence of fingerprints, a positive identification can be made from comparison of features revealed in x-ray pictures taken before and after death.

Forensic anthropologists seek unique and individualizing features in the skeleton, such as a healed broken bone or evidence of a particular bone disease, and in the teeth, such as the number and shapes of dental fillings. Most identifications are achieved through comparing dental x-rays of a missing person with those of the victim. Unusual dental traits such as chipped front teeth visible on photographs also provide evidence leading to a positive identification. When all else fails, a facial reproduction, either in clay or a sketch by an artist, can be produced and the presumed likeness distributed to police agencies or news media in an effort to find someone who recognizes the victim.

Forensic anthropologists, with their specialized knowledge of comparative anatomy and skeletal variability, have become integral members of homicide and mass disaster teams that travel worldwide. Their expertise in the identification of decomposed and skeletonized human remains has led to the identification of many individuals for whom conventional means have not been successful.

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A QUIET REVOLUTION: ORIGINS OF AGRICULTURE IN EASTERN NORTH AMERICA

"Long before the introduction of maize, farming economies and an agrarian way of life had been established in eastern North America."

"Documenting the origins of agriculture in North America emerged from revolutionary improvements in collecting ancient seeds combined with the application of new, sophisticated technologies - and the puzzle's missing pieces finally fell into place."

-- Bruce D. Smith

Today we take the domestication of plants and animals for granted, but the fruits, vegetables, grains, milk products, and meats we eat everyday come from long ago human

intervention in the life cycles of wild plants and animals. Plant domestication can be defined as the human creation of a new form of plant--one that is distinguishable



THE TRANSITION FROM HUNTING AND GATHERING TO DOMESTICATION

from its wild ancestors and its wild relatives living today, and one that is dependent on human intervention--harvesting and planting--for survival. Plant domestication is not simply a physical change. It is a revolutionary alteration in the relationship between human societies and plants, enabling relatively few people to create food for large human populations. The beginning of agriculture thus marks a clear watershed and defines one of the major ecological changes in the history of the planet.

Many textbooks today still assert that agriculture in the New World originated in Mesoamerica, and that maize and squash spread from Mexico to eastern North America. Only then, textbooks explain, did Native North Americans learn to cultivate maize and squash and also beans and a few indigenous seed crops such as sunflower. The growing of corn, squash and beans thus enabled eastern Native North Americans to build larger settlements and more complex societies that depended on maize agriculture imported from Mesoamerica where larger-scale societies had also developed.

Contrary to this long-held belief, new research shows that eastern North America can now be unequivocally identified as a fourth major independent center of plant domestication, along with the Near East, China, and Mesoamerica (Smith, 1989:1566). In fact, eastern North America provides the clearest record available of agricultural origins anywhere in the world, providing new understanding of the processes involved in this key transformation in human history.

PUZZLE PIECES

What were the domesticated food crops that Native American farmers grew in eastern North America? When and how did their domestication occur? Why has it taken so long to recognize the contribution Native North Americans made to the origins of agriculture in the history of humankind? The understanding of plant domestication in eastern North America is a story that can be visualized as a puzzle, with some pieces

in place long before the full picture emerged.

Some pieces were discovered in the 19th century: Ebenezer Andrews excavated the first cache of stored indigenous seeds in Ash Cave, Ohio in 1876. Many pieces emerged in the 1930s and 1950s, but several key pieces came together recently, in the 1980s and 1990s, as new evidence came to light and new technologies for dating and analysis were applied.

The "Quiet Revolution" is a story of several transformations: 1) of Native North Americans slowly changing their way of life from foraging to farming; 2) of a new generation of archaeologists transforming their discipline with new questions, discoveries, and technologies; and 3) of one Smithsonian scientist working to put some of the final puzzle pieces in place. Archeologist Bruce Smith, who relishes puzzles, theoretical challenges, and the opportunity to turn conventional wisdom on its head, found these pieces in some unlikely places: an old cigar box containing thousands of tiny ancient seeds, and an Arkansas river valley where a bunch of small, wild, lemon-sized gourds grow.

EARLY NATIVE AMERICAN FARMERS

The following facts now are indisputable. By 2,000 B.C. in the eastern Woodlands, Native Americans were planting and harvesting at least four indigenous seed plants, marking the beginning of their transition from foragers to farmers. Maize arrived from Mexico about A.D. 200, but for six hundred years thereafter corn was not a major food source. After A.D. 800, intensive maize agriculture spread quickly and widely throughout the Eastern Woodlands as corn became a major staple of the diet. Why corn did not become widespread until after A.D. 800 remains a mystery; at first it may have been used only for religious and ceremonial purposes.

With new tools, archaeologists have documented three major turning points or periods of transition in the development of Native North American domestication:

TRANSITION ONE: 3000 B.C. - 2000 B.C.

Native North Americans discovered that wild seed plants growing along river floodplains could be controlled; that plants could be harvested and used as food, with seeds stored and replanted in prepared garden plots the next year. Four indigenous plants underwent this transition to full domesticates, with clear morphological changes taking place in their seeds. Three additional cultigens appear as food crops as Native Americans began to harvest these previously wild sources of food. The highly nutritious seeds from these seven plants could be variously boiled into cereals, ground into flours, or eaten directly.

Each of the seven indigenous plants involved--chenopod, marshelder, squash, sunflower, erect knotweed, little barley, and maygrass--had its own particular course of development. Most began as wild plants growing along river floodplains that Native North Americans first gathered and used. They gradually brought these plants under their control as they harvested them and planted their seeds the following year. By 2,000 B.C., there is evidence of indigenous crop domestication occurring over a broad geographical area, on lands today known as Tennessee, Arkansas, Illinois, Kentucky, Ohio, Missouri and Alabama. After a slow beginning for each crop, the over-all shift to domestication occurred rather abruptly, with several spring and fall crops introduced together, some high in oil and some in starch. As Bruce Smith wryly comments:

If domestication occurred in some other part of the world, and involved grains such as wheats or barleys, such an abrupt, broad scale, and highly visible transition to an increased economic presence of seven domesticated and cultivated plants would quickly be acknowledged as marking a major shift toward farming economies. But in eastern North America...where the indigenous crops in question have little name recognition, this transition is still often brushed aside as involving minor crops of little

economic import, in all likelihood grown only in small garden plots (Smith: 1993:14).

TRANSITION TWO: 250 B.C.- A.D. 200

Food production economies emerged. Greater amounts of seeds appeared in the diet, and seed crops became the focus of more intensive cultivation, as farmers planted them away from their original habitats. Maize first appears in small amounts.

The emergence of indigenous crop economies, not maize, parallels in time the prehistoric North American societies that archaeologists term "Hopewellian." Ohio, Illinois and states farther south are dotted with remains of farming communities that existed between 250 B.C. and A.D. 200, many of them marked by Hopewellian features such as large geometric earthworks, conical burial grounds, elaborate mortuary decorations and beautifully molded pipes, bowls, icons and other objects.

Members of Hopewell farming societies lived in single-household settlements of perhaps a dozen individuals. They settled in river valleys--ideal locations for small fields--and crafted hoes and other tools suited for small-scale land clearing. Studies of modern wild crop plants that were grown by the Hopewell farmers indicate these plants had high potential harvest rates and yields. For example, a 200 square foot field, planted equally with marsh elder and chenopod, could have been harvested by five people in little more than a week. Even more impressive, nutritional analyses indicate that a field of this size and content would have provided half the caloric requirements of a household of ten for a period of six months.

TRANSITION THREE: A.D. 800 - A.D. 1100

Food-producing economies based on these indigenous seed crops flourished from about A.D. 200 until about A.D. 800. This early farming served as a preadaptation for a rapid and broad-scale shift to large field agriculture after A.D. 800 when a new, nonindigenous crop plant--maize--was

introduced. Maize came to dominate the fields and diets of Native North American farmers extending from what is now northern Florida to Ontario in Canada, from the Atlantic Coast to the Great Plains. Archaeologists now know that maize appeared in Native North American villages more than 2,000 years after indigenous plants were domesticated and well after the rise of Hopewell societies.

Even more dramatic is the coincident emergence of a second major episode of social transformation known as the Mississippian chiefdoms. From A.D. 800 up until European contact, the river valleys of the Southeast and the Midwest became dominated by the fortified villages of Mississippian chiefdoms. These societies exhibited considerable social inequality and organizational complexity. This complexity is reflected in raised burial mounds surrounding central plazas that were occupied by privileged individuals who enjoyed more ceremonial burials than the general populace.

RESISTANCE TO NEW THEORIES

If Native North Americans domesticated indigenous seed plants deliberately and independently between 3,000 B.C. and 2,000 B.C. in the Eastern Woodlands, why has it taken so long for their contribution to be recognized?

Perhaps it is because these domesticated crops are so little known. In contrast to maize and beans, they did not become important foods in the diets of North Americans living in modern times; only squash and sunflower are used today. Furthermore, the seed crops come from plants with difficult to pronounce scientific names or obscure identities and use. They include *Curcubita pepo* (squash); *Iva annua* (marshelder or sumpweed); *Helianthus annuus* (sunflower); and *Chenopodium berlandieri* (chenopod or goosefoot) as well as three cultigens whose seeds do not reflect the same distinct morphological changes that would enable archaeologists to call them full domesticates--erect knotweed, little barley, and maygrass.

The obscurity of most of these seed crops in today's world, and the rich descriptions early settlers left of Indians growing corn, beans and squash go far to explain why it is so difficult to change people's conceptions of the origins of Native American agriculture:

School children across America learn that Indians of the East grew maize, beans, and squash...south-eastern tribes made more than ninety different dishes from corn. More importantly, maize [or corn] is an ever-present dietary element in modern America. We consume corn oil and margarine, corn on the cob, creamed corn, popcorn, caramel corn, corn nuts, corn flakes, corn fritters, and corn... We know what we eat (Smith: 1993:5-6).

SCIENTISTS AS DETECTIVES

In the early 1980s Smith was increasingly convinced that it was eastern Native Americans who discovered farming, and that seed crops other than maize explained the appearance of Hopewell societies. But how could he find evidence to strengthen this idea and convince those who still did not believe it that Native North Americans independently discovered agriculture?

Smith knew the answer must lie within ancient plant remains. By the 1960s and 1970s, several investigators had confirmed long held suspicions that two local plants were domesticates--sunflower and marsh elder. Various other plants had been proposed as likely candidates for early domestication, among them a chenopod that was found in such abundance in archaeological sites that it seemed unlikely it was merely gathered in the wild. To Smith, *Chenopodium* seemed a particularly good potential domesticate to study because he could compare any ancient seeds he found to seeds from the modern Mexican domesticate, *Chenopodium berlandieri*, and also compare the ancient seeds to modern wild chenopods in the eastern United States. These comparisons would show whether or not the ancient seeds carried the clear markers of domestication.

Smith began to look for one good-sized collection of whole, well-preserved chenopod seeds clearly stored by ancient farmers. The seeds had to come from an undisturbed site, and they had to date to a time before maize was introduced in eastern North America. If Smith could find even one such collection, and if all the seeds showed the tell-tale sign of domestication--the thin, somewhat rectangular seed coat identified with a scanning electron microscope--then he would have definitively added another indigenous seed crop to the list and put one of the final puzzle pieces in place.

RUSSELL CAVE

Smith began to search old archaeological reports for references to seeds excavated from storage contexts. One collection seemed particularly promising: Russell Cave, Alabama. Fortuitously, Russell Cave had been excavated in 1956 by Carl Miller, then with the River Basin Surveys of the Smithsonian Institution. Smith knew that the large amounts of uncatalogued material from these surveys were down the hall from

his office in the National Museum of Natural History. If seeds still existed, he might have some chance of re-discovering them.

Smith read everything Miller wrote about his excavation, but found only one brief paragraph describing seeds:

During the first season's work in Russell Cave, the charred remains of a small hemispherically-shaped basket were found filled with equally charred *Chenopodium* seeds. The seeds were later identified by experts in the US Department of Agriculture as belonging to this plant family. Their presence on the Early Woodland horizon, about 5,000 years ago, indicate that these people knew the potential of these wild uncultivated seeds as a staple food source, harvested them by means of seed beaters and baskets and converted them to food (quoted in Smith, 1993: 117). (Emphasis added.)



Could these "wild seeds" be, in fact, from domesticated plants? Could this basket be the "needle in the haystack" that Smith was trying to find? First, of course, he had to find the seeds. Unfortunately, there had been a tragic loss of the original storage basket during the excavation:

At about seven feet we came across the basket...made of coiled strands of grass fiber...[the basket was] filled with small seeds, probably some wild grain the cave men gathered and ate....Since it was late in the evening when we found the basket, I decided to wait until morning before trying to dig it out...but when we entered the cave the next morning, we were dismayed to find it gone...someone had vandalized the cave (quoted in Smith, 1993: 117).

Despite the basket's disappearance, Smith decided to search through the 38 drawers of uncatalogued Russell Cave materials. Towards the end of several days of endlessly sorting through lithic materials, Smith found an old cigar box (Tampa Nugget Sublimes) bearing the longhand inscription "Basket F.S. [field specimen] 23." He opened the box but found only an old, crumbled brown paper bag inside; but it too was labeled "F.S.23." This bag could be the way Miller stored the seeds that had spilled out from the missing basket. With apprehension and anticipation, Smith unfolded the paper bag and found exactly what he had hoped for: a bunch of very old, very dark, and very charred seeds! In fact, as he examined the plant remains, Smith estimated there to be perhaps 50,000 carbonized *Chenopodium* seeds! This spectacular discovery was exactly what he needed!

ARCHAEOBOTANY

Smith next turned to the new tools that were revolutionizing the field of archaeology and strengthening the subdiscipline of archaeobotany. By dating and analyzing the structure of the Russell Cave chenopod seeds as well as modern domesticated *Chenopodium* and its modern wild relatives, Smith could pinpoint the

time of chenopod domestication in eastern North America.

At this point, Smith's research incorporated innovative applications of new scientific technology. Most of the recent advances in understanding agricultural origins, in fact, depend upon four technological advances:

1) **Water Flotation Technology** that dramatically improves the recovery of small carbonized seeds and other plant parts from the archaeological context. The principle is simple: large amounts of excavated soil are mixed with water, allowing seeds, charcoal and other light materials to float to the top.

2) **Accelerator Mass Spectrometry (AMS)**, developed and brought into use since the mid-1970s that allows direct radiocarbon dating of individual seeds and other tiny samples. This technique enables archaeologists to date accurately the emergence of plant domestication.

3) **Scanning Electron Microscopy (SEM)**, that revolutionized the field of archaeobotany in the 1980s as it became widely used to study the micro-morphology of ancient seeds. Only with the SEM can seed coat thickness indicating domestication be measured since the SEM can magnify objects thousands of times.

4) **Stable Carbon Isotope Analysis** of human bone that allows scientists to document the consumption of maize. Maize, a tropical grass, has more carbon-13 relative to Carbon-12 than other food plants of temperate North America. This difference shows up in the bones of people who began to eat large quantities of corn after A.D. 800.

Using AMS dating and the SEM, Smith demonstrated without a doubt that the Russell Cave cache of *Chenopodium* was a very early collection of stored domesticated seeds, put aside for planting by early Native North American farmers at least 2,000 years ago, well before maize entered North America!

(continued on p. 13)

AMERICAN INDIAN MUSEUM DIRECTOR SPEAKS OUT

The Smithsonian's newest museum is the National Museum of the American Indian (NMAI). In December 1992, Rick West, the Museum's Director, spoke to the American Anthropological Association Annual Meeting in San Francisco. An abridged version of his remarks follows the editor's note.

[Editor's Note: George Gustav Heye, a New York banker who died in 1957, amassed over one million American Indian objects between 1903 and 1956. This collection became the Heye Foundation museum in New York City. By 1976, discussions began exploring the possibility of the Heye Foundation becoming part of the National collections.

Thirteen years later, on November 28, 1989, President Bush signed legislation that established the Museum of the American Indian, Heye Foundation, in New York City as the National Museum of the American Indian (NMAI). Legislation called for the establishment of the NMAI as a living memorial dedicated to the collection, preservation, study, and exhibition of American Indian languages, literature, history, art, and culture. In June 1990, the New York State Supreme Court granted the petition of the Museum of the American Indian to transfer its collections, assets, and staff to the Smithsonian Institution. W. Richard West Jr., an attorney and member of the Cheyenne-Arapaho Tribes of Oklahoma, was appointed Director on June 1.

The new museum, which will occupy the last space on the National Mall, will be built by the 21st century and will incorporate Native American perspectives in design, content, and programs. A research and study facility will be constructed in Suitland, Maryland. A third facility, the George Gustav Heye Center, located in the Custom House in New York City, is now open to the public.]

"Research And Scholarship at the National Museum of the American Indian: The New 'Inclusiveness'"

I embrace, warmly and eagerly, the opportunity to talk with you this evening through the medium of a presentation I have entitled, "Research and Scholarship at the National Museum of the American Indian: The New 'Inclusiveness'" ...From an historical perspective, perhaps no academic discipline or system of knowledge has a greater stake in this nascent Smithsonian museum than the field of anthropology. And we would be less than honest with one another if we did not concede at the outset that for several years now the waters between the Indian and anthropological communities have been roiled, and the discourse between them often characterized by considerably more heat than light....

I am here to take what I hope is a seminal first step in looking prospectively at the relationship between the National Museum of the American Indian (NMAI) and the work to which many of you, with diligence, sincerity, and competence, have devoted your professional lives.

First, I want to describe three principles that will guide the NMAI as it defines what the terms "research" and "scholarship" mean programmatically. The first two principles relate primarily to the area of research and the third to scholarship. Second, I want to suggest the programmatic processes, ideas, and initiatives that seem to flow from those principles.

The first [principle] is the NMAI's explicit recognition of the time continuum and contemporary existence of the indigenous cultures of our Hemisphere. Native peoples of this Hemisphere are still here in culturally definable forms. We have not remained static. We have been influenced by non-Native cultural forces, and we have even adapted, indeed, often brilliantly so. But "adaptation" is not to be confused with "assimilation." The essence of our indigenous nature continues to exist and to evolve in dynamic and culturally significant ways.

I remember the statement of an elder from the Fort Mohave Reservation in California that...appears in the National Park Service's recent report entitled *Keepers of the Treasures: Protecting Historic Properties and Cultural Traditions on Indian Lands*:

When we think of historical preservation, I suppose you think of something that is old, something that has happened in the past and that you want to put away on a shelf and bring it out and look at [it] every now and then.... In our way of thinking, everything is a significant event, and the past is as real to us as being here right now. We are all connected to the things that happened at the beginning of our existence. And those things live on as they are handed down to us.

The second principle is the pivotal role of the NMAI in affirming and supporting this cultural continuity. In a critical sense, this institution is as much an institution of living culture as it is a "museum" in the conventional meaning of the term. I believe that the Congress of the United States signaled that important distinction when it mandated in the Museum's authorizing legislation that Indians comprise a majority of the outside members of the governing Board of Trustees and that it "make available curatorial and other learning opportunities for Indians...."

I also view this cultural undergirding of contemporary Native communities as an integral part of a broader national cultural agenda rather than a gratuitous or ideological offering to Indian America. Just as our nation finally, if not too belatedly, is coming to grips with the devastating costs of a rapidly declining bio-diversity, so we also must begin to calculate and to remedy the cultural damage we suffer by permitting the further diminution of vital elements of our country's cultural diversity. The NMAI can and must be a critical aspect of that remedy.

My third and final principle concerns a question that goes to the heart of the NMAI's definition of the term "scholarship":

whose voices are heard in determining cultural "truth" as it relates to the cultural experiences and history of the Native peoples of the Americas? I recall my fascination with a metaphor used by David Hurst Thomas in his essay, "Cubist Perspectives on the Spanish Borderlands: Past, Present, and Future":

[W]e compare traditional Spanish Borderlands scholarship to the work of Renaissance masters, both of which endeavored to capture reality from a single perspective--the snapshot of the past approach.

We argue instead that a more thorough understanding of the Columbian encounters is possible only through a cubist approach. Just as Renaissance painters believed that they were depicting reality, some borderlands scholars and special interest groups persist even today in pursuing and promoting their single-point version of the 'truth'--the way it really was. But the only truth is the artificiality of our perspectives because, to one degree or another, all views of the human past are created by those telling the story.



In a world heretofore dominated by scholarship that has been articulated in the third-person voice, however worthy those contributions have been...ours is a cultural institution that demands...multiple perspectives [that] must be enlisted in scholarship regarding Native peoples and their cultures. And, most emphatically, those multiple perspectives must include the voices of Native peoples themselves.

Where do [these principles] lead the NMAI in the fields of research and scholarship? More specifically, what programmatic directions and content do they suggest? In answering these questions, I would like to discuss "research" and "scholarship" discretely and successively.

First, with respect to research, the principles I have described have implications for both its process and substance, and I would like to address those two subjects separately. I want to indicate explicitly and clearly what the implications for process will not be.... I have no intention of imposing a new, reverse exclusivity to replace the old exclusivity that typified the museum community's frequently defensive attitude toward the participation of Indian America in its work. Quite to the contrary, our purpose is to expand the circle of research rather than to contract it--all of you in this room will continue to be welcome at the National Museum of the American Indian.

But I also wish to be candid in stating that the rules of the road have changed. So, yes, our research agenda will reflect directly the stake of Native communities in what we do and their active participation in the establishment of that agenda. And yes, Native peoples will be entitled to call upon the research resources and programs of the NMAI in the direct support of their contemporary efforts to preserve culture. And yes, along the way, we are going to confront some tough and complicated issues, such as how to implement our recently adopted Collections Management Policy's provision that "public access to the collections for research, study, or viewing purposes may be restricted if such access offends religious or cultural practices or

beliefs." But these are exactly the kinds of hard questions that the NMAI--for that matter, any other institution that holds Indian materials--must be willing to take on as the process that drives the "new inclusiveness" of which I speak begins to lock in and to have real institutional impact.

At this point in time, I can only speculate about what the substance of the National Museum of the American Indian's research agenda and practice will be since it still is in formation. But, based upon some two years of direct consultation with our Indian constituents and others, I believe that some of the fundamental contours already are apparent, and here they are.

--Our Cultural Resources Center in Suitland, Maryland will revolutionize the accessibility of our collections, electronically and physically, to an ever widening circle of researchers, including artists, academics, non-traditional scholars, and community scholars.

--We will develop an array of collaborative research relationships among a wide variety of communities and interests, including Indians and non-Indians, academic or scholarly institutions and Indian communities, and traditional scholars and non-traditional scholars.

--We will develop the specific networks that support, facilitate, and extend these collaborations, including other museums, academic institutions, institutions in other sectors of this Hemisphere, tribal museums, tribal libraries, and tribally controlled community colleges.

--And, finally, we will direct our efforts toward areas of applied research that tribes indicate are crucial for purposes of cultural preservation, such as language, song, dance, and ceremonial practice.

I now would like to turn to the second subject I promised to discuss in programmatic terms: scholarship. Again, I want to begin by indicating what I am not

saying. I have nothing but the highest admiration for the intent of anthropology. With respect to the Native peoples of this Hemisphere, I always have understood that intent to be a definition of those very cultural essences that make us Indian. I also deeply appreciate the altruism that motivated many anthropologists in their relationships with Native peoples, at a time when it appeared that we would disappear from the earth forever.

But in the confessional spirit of this evening, let me also be candid and say that I do not believe anthropology ever has achieved its full potential in explicating and defining Indian cultures. And I will be equally blunt in stating why I think anthropology has fallen short of its potential: it has not allowed Indians, in any systematic way, to tell their own story. The scholarly result is not so much wrong as it is incomplete.

I firmly believe that the injection of the first-person Indian voice--not as an "informant" but as a genuine participant in the scholarly process--into the work of anthropology can dramatically enhance and amplify its contributions to scholarship. And the NMAI intends to do precisely that. Anyone who ever has heard Fred Begay, a Navajo and a distinguished physicist at the Los Alamos Laboratories in New Mexico, discourse on the subject of "Navajo physics" appreciates that ideas, systems of knowledge, intellectual constructs, and new ways of perceiving scientific and cultural realities exist that have yet to be known or described.

Keith Basso's cultural cartography project on the Fort Apache Reservation demonstrates the significant scholarly potential of anthropology's collaborating, in a truly participatory fashion, with Indians. There Basso worked with Apache colleagues to map some 467 places of cultural significance on the Reservation--all of which had their own Apache names and many of which had culturally rich stories attached to them. From his standpoint, he, as an anthropologist, gained substantial new knowledge that was physical, intellectual, and linguistic. From the tribe's standpoint,

the results were equally substantial--they represented a significant step down the road of cultural preservation because the information went directly back into the schools attended by Apache children.

In conclusion, I want to leave you with a brief story, a small piece of my own oral history, if you will, that I believe captures the essence of what I hoped to convey tonight concerning research and scholarship at the National Museum of the American Indian. I remember once, several years ago, visiting the Millicent Rogers Museum in Taos, New Mexico. I was contemplating a truly magnificent ceramic pot sculpted by the hand and spirit of Popovi Da, the brilliant son of Julian and Maria Martinez of the San Ildefonso Pueblo. The pot was breathtakingly beautiful. And I was content to stand there, transfixed, for a very long time, simply basking in its uncommon beauty.

But then my eye finally wandered to a piece of text that had been placed next to the pot. It was a statement by Popovi Da himself. I have never forgotten it because it spoke volumes about Popovi Da's world and how what I saw related to that world. Here is what he said:

We do what comes from thinking, and sometimes hours and even days are spent to create an aesthetic scroll in design.

Our symbols and our representations are all expressed as an endless cadence, and beautifully organized in our art as well as in our dance....

There is design in living things; their shapes, forms, the ability to live, all have meaning....Our values are indwelling and dependent upon time and space unmeasured. This in itself is beauty.

In those moments of intense reflection that passed as I read Popovi Da's statement, something crystallized for me. And it was

(continued on p. 12)

TEACHERS CORNER: INTRODUCTORY READERS

Locating outstanding texts and readers for students at any level always presents a challenge; for high school and beginning undergraduates, the challenge can be particularly frustrating. Hence, it is with real pleasure that *AnthroNotes* editors can recommend two introductory readers for beginning students, edited by Aaron Podolefsky and Peter J. Brown and published by Mayfield Publishing Co.:

Applying Anthropology, An Introductory Reader, 2nd ed., 1992.

Applying Cultural Anthropology, An Introductory Reader, 1991.

Although the titles reflect the editors' interest in the uses of anthropology in today's world, the readers are not designed for courses in Applied Anthropology. Instead, the sequence of chapters follows the organization of most standard introductory textbooks. The articles in these readers, however, are anything but standard. For the most part, the readings are short, well-written and varied, with many taken from "popular" journalistic sources such as *Natural History*, *Discover*, *The New York Times*, and *Human Nature*.

The first reader, *Applying Anthropology*, is divided into three sections: Biological Anthropology, Archaeology, and Cultural Anthropology. The longest section is the third, with articles arranged under the subheadings of Culture; Culture and Communication; Culture and Agriculture; Economy and Business; Sex Roles and Socialization; Politics, Law, and Warfare; Symbol, Ritual, and Curing; and Social and Cultural Change. The Biological Anthropology section reflects the variety and "applied" nature of many of the readings. The section includes "Teaching Theories: The Evolution-Creation Controversy," Robert Root-Bernstein and Donald L. McEachron, *The American Biology Teacher*, October 1982; "Ancient Genes and Modern Health," S. Boyd Eaton and Melvin

Konner, *Anthroquest*, Winter 1985; and "Profile of an Anthropologist: No Bone Unturned," Patrick Huyghe, *Discover*, December, 1988.

The second reader, *Applying Cultural Anthropology*, is divided into eleven sections related to culture; many overlap the sections and selections of the first reader. Each section has three or four readings that run the gamut from well-known classics (Horace Miner's "Body Ritual Among the Nacirema," Laura Bohannan's "Shakespeare in the Bush") to timely articles from unusual sources ("The Aids Epidemic in San Francisco" from *Anthropology and Epidemiology*, 1986).

The editors of these readers clearly care about students and anthropology. They believe that anthropology can inspire students and that students need to become familiar both with the fundamental questions of humanity addressed by anthropologists and the practical applications of the field.

(continued on p. 12)



APPLYING ANTHROPOLOGY

In both readers, several of the articles exemplify research methods in action, or profile anthropologists working outside of academia. For example, in the section on fieldwork in *Applying Cultural Anthropology*, Margaret Mead's "Letter from Peri-Manu II" allows students to see Mead reflecting on her long involvement with the people of Manus; and later in the section on Socialization and Parenting, Jeanne Fulginiti explores her career as a school administrator and the ways her anthropological training helped her devise solutions for her school system ("Profile of an Anthropologist: Ethnography in School Administration").

To make these readers even more practical, the editors have added a short introduction with five questions before each reading, helping to focus students' attention. Most of the questions highlight central themes of the reading or draw attention to important details. Some questions are open-ended and direct students and faculty to avenues for further thought and discussion. In summary, these readers are fine resources to bring anthropological adventure to the classroom.

Ruth O. Selig

* * * *

("NMAI Director," continued from p. 10)

this: while all of us can recognize and appreciate the compelling beauty of Popovi Da's art, perhaps, in the end, it is only his voice that can trace his splendid art to its primal wellsprings of motivation, creativity, and belief.

You and I--together--need to draw near to Popovi Da to listen to what he has to say, to include it in our important work. And the National Museum of the American Indian intends to do precisely that. Because for us it is not an option--it is no less than a cultural imperative.

W. Richard West, Director
National Museum of the
American Indian

[Richard West's complete speech is printed in the *Anthropology Newsletter* 17(1), February 1993, pp. 5-8.]

MARK YOUR CALENDARS

The American Anthropological Association (AAA) will be sponsoring a one-day workshop for upper elementary and secondary local teachers at its annual meeting in Washington, DC this November. The workshop will introduce teachers to the field of anthropology through talks given by field researchers and offer practical suggestions for incorporating anthropology into classroom curricula. More information will be available in September. Write: Ann Kaupp, Department of Anthropology, NMNH MRC 112, Smithsonian Institution, Washington, DC 20560.

COBBLESTONE PUBLICATIONS

Cobblestone Publishing produces four excellent publications for students, grades 4-10. *Cobblestone* introduces history; *Calliope* covers world history; *Faces* explores cultures and geography; and *Odyssey* focuses on science. These monthly publications are each 48-pages devoted to a single topic. For a free catalog, including a listing of back issues, contact: Cobblestone Publishing, 7 School St., Peterborough, NH 03458; 1-800-821-0115; FAX (603) 924-7380.

("A Quiet Revolution," continued from p. 6)

A NORTH AMERICAN SQUASH?

The diffusionists, however, still had one "ace in the hole" to prove their theory of Mesoamerican origins for North American agriculture. Mexico was clearly the hearth from which sprang today's New World pumpkins, squashes and gourds, members of the large species *Cucurbita pepo*, or so it was thought. In the late 1960s and early 1970s, a number of archaeological discoveries of domesticated *Cucurbita pepo* seeds in Mexico were dated to nearly 8,000 B.C., strengthening the belief that Mexico was the primary source of New World domestication. In addition, there were no documented wild *Cucurbita pepo* in North America, so it was logically assumed that all the prehistoric remains of *C. pepo* found in eastern North America, including some recently discovered charred rind fragments, dated as early as 7,000 years ago, must represent domesticated squash introduced from Mexico.

Smith and his colleagues were not convinced. The 7,000 year-old fragments of burned *Cucurbita pepo* rind could have come from wild gourds. Smith realized he needed to prove that these 7,000 year-old rind fragments were from wild rather than domesticated gourds, and he needed to locate modern closely related wild gourds proving that wild gourds had always existed in eastern North America. If he could do both, he would solve the puzzle and overturn the diffusionist theory that North American agriculture first was introduced from Mesoamerica.

Smith and his colleagues raised some interesting questions. If domesticated squash had been introduced 7,000 years ago in the East from Mexico and eastern hunters and gatherers had turned to farming, why was this the only crop they grew for the next 3,000 years? More importantly, if the squash had been domesticated for 3,000 years, why was it morphologically identical with wild gourds--small size, thin rind, and small seeds? Even more curiously, why would *Curcubita pepo* materials from eastern North America

that were 4,000 years old (2,000 B.C.) exhibit clear morphological changes indicating domestication, but materials from the 3,000 years previous to that not show such signs? Smith noted, with satisfaction, that the morphological signs of domestication for *Curcubita* squash (larger seeds, thicker rind) appeared about 2,000 B.C., the same time period that similar changes signaled the domestication of three Eastern North American seed plants--sunflower, marsh elder, and chenopodium.

To Smith and his colleagues this fact suggested the real possibility that the 7,000 - 4,000 year old *C. pepo* rinds in the East resulted not from an introduced domesticate, but from an indigenous wild *C. Pepo* gourd that was domesticated along with the other three eastern plants about 4,000 years ago (2,000 B.C.). But if this were true, why were there no wild gourds left in eastern North America today?

At this point a stunning piece of evidence came out of the blue. A 1986 doctoral dissertation written by Deena Decker-Walters provided the first modern evolutionary and taxonomic analysis of the species *C. pepo*. Decker-Walter's research used isozyme analysis--a technique for measuring protein similarities (and indirectly genetic differences) between two species--to demonstrate that the *C. pepo* domesticates fall into two separate genetic groups.

The orange-skinned pumpkins introduced from Mexico are in one developmental lineage. But the green and yellow squashes are in a genetically quite different group, suggesting two distinct developmental histories and origins. It was possible that Native Americans in eastern North America had domesticated indigenous wild gourds (the ancestor of green and yellow squash) around 4,000 years ago. The 7,000 year old rind fragments showed no definite signs of domestication and hence probably came from wild plants. But if they did, why were there no modern wild gourds today?

(continued on p. 14)

IN SEARCH OF THE WILD EASTERN GOURD

The existence of modern wild gourds could prove once and for all that the second lineage--the summer and acorn squashes--came from indigenous plants. Not knowing much about wild gourds but willing to look for them, Smith and his colleague C. Wesley Cowan, from the Cincinnati Museum of Natural History, decided in 1990 to try to find them.

They first asked gourd and squash specialists about wild gourds in eastern North America. Several experts told them there were no wild gourds in the region, nor had there ever been any. Not dismayed, and following clues from earlier researchers, Smith and Cowan began to ask people who lived in the area. Much to their surprise, local people told them about free-living gourds in Arkansas, Kentucky, Missouri, Alabama, Illinois, Tennessee and Louisiana--a number one weed problem, they were told. Smith and Cowan went back once again to the "gourd experts" for confirmation. Once again, they were told these were not wild gourds: "Oh, those gourds, we know all about those gourds. They are not 'wild' but feral gourds that were derived from domesticated, ornamental gourds, which 'escaped' from cultivation and since World War II have become agricultural weeds" (unpublished lecture by Smith, April 1993).

Realizing they just might be on the trail of wild gourds, Cowan and Smith decided next to turn to herbaria to find out how long these gourds had been around in the United States. To their delight, a survey of herbaria yielded much new data, herbarium sheets showing gourds collected from across eleven states, from Texas north into Illinois and east along the Gulf coast to Florida. Even more interesting, the history of collecting of these free-living gourds extended long before WW II, well back into the 19th century, with a number of specimen sheets from the St. Louis area dating to the 1850s and 1860s. Smith and Cowan then questioned the experts where these 19th century gourds could have come from. They were told that early settlers

were growing ornamental gourds, and some had "escaped" back even in the 19th century. But where did the early settlers get these gourds if there were no wild gourds? The answer again came quickly back: from seed catalogs (unpublished lecture by Smith, April 1993).

Beltsville, Maryland is home to the National Agricultural Library, which houses the largest collection of seed catalogs in the country. Browsing through reams of seed catalogs in search of obscure Ozark gourds, Cowan and Smith discovered that, with few exceptions, *C. pepo* gourds did not begin to grace the pages of seed catalogs until well into the 1870s. This was several decades after gourds had been collected in St. Louis as evidenced in the old herbaria sheets.

More convinced than ever of the existence of wild gourds, Smith and Cowan decided to turn to the Ozark river floodplains. They chose the Buffalo River, unsettled until the 1850s, never much of a farming community, and since the 1950s a national scenic river--with virtually no cultivation of any kind carried out in its watershed for four decades.

Smith describes his and Wes Cowan's trip along the Buffalo River: "the canoeists and chiggers are gone, the valley empty and quiet, with only deep blue skies, bright yellow autumn sycamores, riffling cold waters across gravel bars, and the excited cries of discovery echoing off steep limestone cliffs." The Ozark gourds were all over the place, "in almost every stream or river we investigated, we found wild gourd vines climbing up into trees and bushes or stretching across gravel bars. These gourds had been hiding in plain sight for 150 years!" (unpublished lecture, April 1993).

THE PUZZLE COMPLETED

The two archaeologists found literally hundreds of gourds, each about the size of a hardball or smaller, ivory colored with occasional green stripes. Each gourd contained from 100 to 200 seeds, constituting an excellent food source, being 25% protein. Smith and Cowan turned their

gourds over to botanist Deena Decker-Walters, authority on *Curcubita* taxonomy, genetics, and evolution. She and Terrence Walters compared the isozyme profile of the Ozark Wild Gourd with other wild gourds and with a wide range of domesticated pumpkins and squashes belonging to the species *Cucurbita pepo*. They concluded that the Ozark Wild Gourd exhibited a unique genetic profile, confirmed it as a wild plant and not a "garden escape," and established it as the likely wild ancestor of eastern North American domesticated squashes, a lineage with a history quite separate from the pumpkins of Mexico!

Still surviving today in the Ozarks, it was this wild gourd that Native Americans living in eastern North America developed into different varieties of domesticated squashes between 3,000 and 2,000 B.C., at the same time that they domesticated sunflower, marshelder, and chenopod.

The puzzle finally was complete. The old diffusionist arrow showing domestication in eastern North America originally coming from Mesoamerica had been toppled. The textbooks could be revised and now should read:

Native North American women and men domesticated local plants, including the wild ancestor of squash and several highly nutritious seed crops, long before any domesticated plants were introduced from Mesoamerica. This revolutionary contribution of Native North Americans makes eastern North America one of the world's four major independent centers of plant domestication along with the Middle East, China, and Mesoamerica!

Ruth O. Selig

[AUTHOR'S NOTE: There was clearly no one "prehistoric genius" who discovered how to plant and harvest seeds, no prime mover of domestication. Similarly, no one scholar alone could have unraveled the entire story of the independent origin of agriculture in eastern North America. Although this article is based on writings, interviews, lectures and unpublished materials of Bruce

Smith, Smith's publications extensively document the contemporaneous work of numerous colleagues working on the puzzle of domestication in North America, particularly that of David and Nancy Asch, Wesley Cowan, Gary Crites, Deena Decker-Walters, Richard Ford, Gayle Fritz, Kris Grimillion, Fran King, Patty Jo Watson, and Richard Yarnell.]

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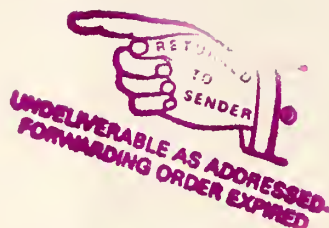


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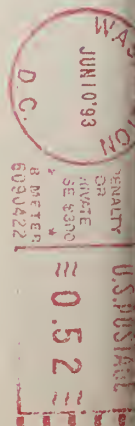
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RACE AND ETHNICITY IN AMERICA

Varieties of (Homo sapiens): "Africanus negreus (black), Americanus rubescens (red), Asiaticus fuscus (tawny), and Europeus albescens (white)." (Linnaeus 1758)

"In my opinion, to dismember mankind into races ... requires such a distortion of the facts that any usefulness disappears." (Hiernaux 1964:43)

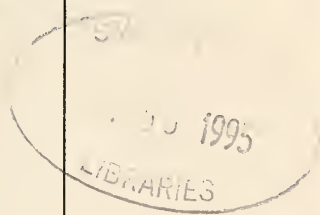
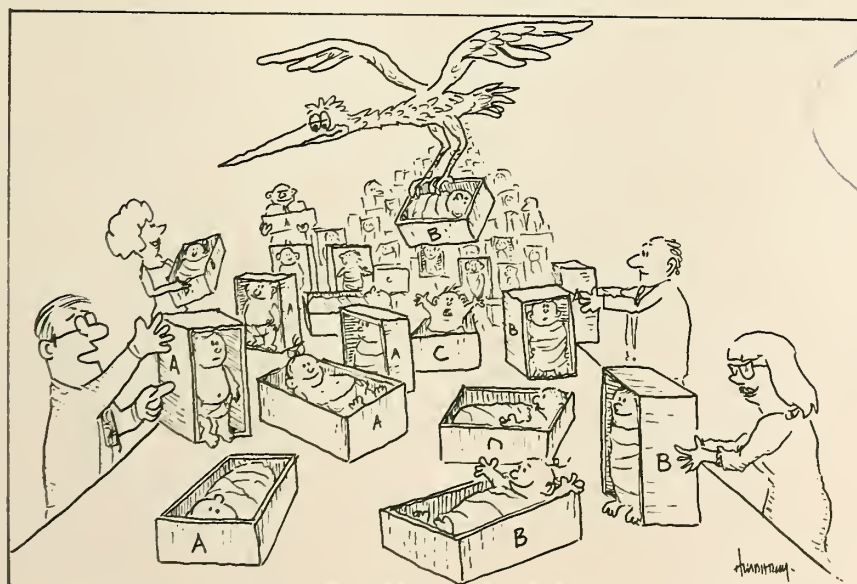
"...race and subrace do represent a truth about the natural world, which cannot be adequately described without consideration of them." (Baker 1974:4)

"Race is a term originally applied to populations who shared close common ancestry and certain unique traits, but it has been so overworked and its applications so broad and general that race is nearly

useless and is often replaced by ethnic group." (Molnar 1992: 36)

"It is important...to have a clear... understanding of the difference between race and racism, on the one hand, and ethnicity and ethnocentrism on the other." (Smedley 1993: 29)

Shortly after birth, each American baby is placed in a box--not a physical box, just a box on a piece of paper. This process, which counts the child as belonging to one and only one "race" or "ethnic group," will be repeated over and over throughout an individual's lifetime. Current American "boxes" include: 1. White, 2. Black, 3. Hispanic, 4. American Indian, 5. Eskimo or Aleut, 6. Asian or Pacific Islander. Anthropology departments sometimes



receive desperate calls from parents: "I am from Pakistan, should I check 'white' or 'Asian'?" "My wife and I belong to different groups, how do we classify our baby?"

As a child grows, the "box" often will be designated by others, without the person's knowledge or input, as though a simple set of rules could generate a "correct" classification. But is there such a set of rules? Such classification implies that pure races and cultures existed with little intermixture in the recent past. But did such a time ever exist? Before air travel? Before Columbus? Before Marco Polo?

As the initial quotations suggest, anthropologists disagree about the subject of race and ethnicity, and opinions have radically changed over time. Far from reflecting biological and cultural "reality," race and ethnicity are terms increasingly seen as arbitrary constructs fulfilling a social need, with content and limits negotiated among members of each society. How else explain why university affirmative action offices group people from the Indian subcontinent with 'whites,' while in South Africa, they are officially 'Asians'. Japanese visitors to South Africa, however, are classified as 'whites'. In the 1990 census, every non-Native American who is not of Asian descent must be either 'black' or 'white', while 3,500,000 non-Asian South Africans are classified as 'coloured', neither 'black' or 'white.'

For over 100 years, "science"--particularly its biological and anthropological branches --has been asked three questions: Do races exist? If so, why? What is the most accurate racial classification, whether absolute or relative to geography and history? The larger question, most recently addressed by the scientists themselves, is: Why do we care? Why is the race issue important to scholars, and, even more so, to American society at large?

EARLY CLASSIFICATIONS - 18TH CENTURY

Anthropology is the field of knowledge most closely connected to the study of human differences, although attempts to

recognize and describe such differences are more ancient than the formal study of anthropology. The French naturalist Buffon, writing in the mid-18th century, may have been the first scholar to use the word 'race' to describe the varieties within a single species, whether humans or dogs, and to attribute these differences to local alterations of a single ancestral group. Like more modern biologists, he saw these physical differences as responses to different climates, diets, and even patterns of behaviors or cultural practices. We now know that agriculture, for example, resulted in decreasing tooth size in modern humans.



In the 18th century, following Linnaeus' classification of the varieties of Homo, the German scholar and physician Blumenbach developed the concept of human races. He drew up lists of physical and behavioral differences among five major "races": Caucasian (Linnaeus' white or Europaeus albens), Mongolian (Asiaticus fuscus L.), Ethiopian (Africanus negreus), American (Americanus rubescens L.) and Malay, the latter not distinguished in Linnaeus' classification, but added in later editions of Blumenbach's work to encompass the peoples of southeast Asia and the Pacific. Like Buffon, Blumenbach argued for a single origin of humankind, but thought that some races had "degenerated" from their original state.

RACE AND RACISM - 19TH CENTURY

From Blumenbach on, physicians dominated the study of human physical differences, emphasizing human anatomy rather than a

broad natural history viewpoint. Early 19th century scholars, like the American physician Morton, used flawed statistics to show that Caucasians had the largest brains, "Negroes" the smallest. (S.J. Gould, The Mismeasure of Man, 1981). Morton attributed these differences to separate creation (polygenism), rather than to adaptation or degeneration, and saw them as immutable. Gould, Smedley (1993) and others have argued that this shift reflects the emergence of a world view in which physical differences or "race" dominated all other kinds of differences such as class or nationality, and were used to justify the oppression of Africans in particular by peoples of European descent.



Smedley's chapter, "Growth of the English Ideology of Race in America," argues that the English, isolated from the more cosmopolitan Mediterranean world, were particularly unprepared to assimilate people with cultural and physical differences. The English colonized Ireland and America at the same time and grouped both Irish and American natives as "heathen," "idolatrous," "wild," and "savage," characteristics used to justify the appropriation of native lands by the more "civilized" English, and the removal or enslavement of the natives themselves.

Anthropologists, though clearly enmeshed in a racist and ethnocentric European and American culture of 19th century scholarship, saw themselves as countering the prevailing theories of the day by asserting human unity. In 1871, Tyler, an Englishman and founder of anthropology, defined the discipline as the study of "man

and the races of man." Although Tyler was careful to separate race and culture, physical anthropologists, many of whom continued to support polygenism, tended to confuse race and culture as well as to regard psychological traits and cognitive abilities as inborn, like skin color and hair form.

BIOLOGY AND CULTURE - SEPARATE BUT CONFUSED

The confusion of biology and culture continued into the functionalist era of the 1920s and 1930s, with the application of organic models and adaptationist explanations to social phenomena. For example, it was asserted that just as dark skin evolved to protect humans from excessive ultraviolet radiation, so "joking relationships" with the mother's brother evolved to balance a strict avoidance relationship with the father and his relatives. Many so-called functional explanations of biological traits, in particular, were based on untested assumptions. Black boxes are perfect radiators of heat, so it was assumed that dark bodies would perform better in hot weather. In a series of tests conducted by the French Army in North Africa, however, performance differences between whites and blacks under extreme heat conditions failed to materialize. The confusion of biological and cultural or ethnic differences, together with an extreme view of racial and ethnic separation, derived from the polygenists, was incorporated into Nazi ideas of racial hierarchy and purity.

HOW MANY RACES?

With more than 200 years of scholarship on the topic of human variation, do we know how many races or how many ethnic groups there are? Biologists define races as populations of a species that differ genetically from one another. The emphasis on genetic differences is important, since two unrelated populations which inhabit the same area can come to resemble one another physically as both respond to the same selective forces. Since gene pools

(continued on p. 11)

ETHNICITY IN THE USA: AN ANTHROPOLOGICAL MODEL

[Editor's Note: This article is a condensed version of an article published in 1993 in the *Journal of Ethno-Development* 2(1). For a copy, write to Professor Cerroni-Long, Anthropology/Dept SAC, Eastern Michigan University, Ypsilanti, MI 48197. The Teachers Corner written for this issue of *Anthro.Notes* grew out of the author's research on ethnicity, summarized below.]

ETHNICITY AND CULTURE

As a born and bred Italian academically trained in the study of Japanese culture, I never encountered ethnicity as a major social phenomenon until I first visited Hawaii in 1975. Becoming exposed to ethnic diversity for the first time made me realize the great continuity of certain culturally-conditioned patterns of behavior, and the role these patterns play in keeping ethnic groups distinct and separate.

Visiting Hawaii after having spent several years in Japan made me particularly interested in the Japanese-Americans I came to know there. What immediately struck me was how their Japaneseness had been subtly transformed and reinforced. Being familiar with Japanese nonverbal behavior, I could see it reproduced faithfully, even if in a simplified form. What had changed, in some cases dramatically, was verbal communication, especially as a vehicle for the expression of values and beliefs. However, a recognizable Japanese behavioral style was very much present, and among in-group members the decoding of its underlying symbolic meaning seemed to proceed undisturbed by superimposed verbal disclaimers.

These observations considerably strengthened my belief that culture powerfully influences communication, and gave me some basic ideas about how to define ethnicity in relation to culture. If the original patterns of nonverbal behavior are maintained across generations of people born and raised in a culture different from their ancestral one, then perhaps these

patterns constitute a core of cultural behavioral styles that can serve as a key to understanding the dynamics of cultural membership and identity. Subsequent research experiences in Asia, England, and Italy confirmed this. No matter what level of assimilation an ethnic group achieves, its members go on displaying a very specific set of micro-behavioral patterns whose uniqueness is often unrecognized but which, nonetheless, catalyzes both self-identification and group cohesion. Furthermore, these patterns generate a recognizable behavioral style that can establish group boundaries when necessary.

Eventually, I decided to test these ideas by conducting first-hand research in a multicultural society and came to America to pursue this research through graduate training in anthropology. Ethnic diversity is not a peculiarly American phenomenon but the type of ethnic groups one finds here and the ideological definition of ethnicity developed within the context of American society warrant special attention.

Most ethnic groups I had previously studied in Asia and Europe had not experienced relocation. They lived in areas ancestrally theirs and the characteristics of the land they inhabited were very much part of their sense of uniqueness. The situation in the United States is different. With the exception of Native Americans and Mexicans originally living in what has now become the American Southwest, all of the American ethnic groups are the result of migration. Furthermore, as a consequence of the Civil Rights Movement and the nation-wide unrest of the 1960's and early 1970's, there has emerged in the United States a "minority group" ideology. Consequently, over the past twenty years, the cultural diversity of some ethnic groups has been officially recognized and institutionalized through a process of majority-defined incentives, such as affirmative action, for socio-economic advancement. Largely because of this process, ethnicity and minority status have become equated in the minds of many Americans.

RESEARCH APPROACH

During my research on ethnicity in America, I repeatedly found that Americans focused almost entirely upon ideas, and that many held the belief that since ideas change, individuals can continually reinvent themselves. However, I found that I could apply a complex set of micro-behavioral observation techniques, and document the retention of ethnic-specific behavioral styles across generations [see Teacher's Corner]. I was also able to document relevant commonalities in the behavior of people observed in random social settings, evidence of American expressive patterns that create the context and the foil for ethnic diversity.

MODEL OF ETHNICITY

The model of ethnicity I developed is an anthropological one, built upon a specific definition of cultural, ethnic, and subcultural membership, all seen within the context of a comparative, relativistic and self-reflective approach. This approach finds direct application in my "outsider perspective," in the avoidance of any judgmental stance about group-specific rights, and in the emphasis given to self-analysis as the best mechanism for understanding not only one's own cultural/ethnic identity but also the parameters of one's interaction with people of different heritages.

Once I began teaching using my anthropological model of ethnicity, the student response was exceedingly positive, gaining me prestigious teaching awards and increasing the number of anthropology majors in my department. What students appear to find most liberating in the anthropological approach to ethnicity is the acknowledgment that all ethnicity has a cultural content; it is this cultural content--and not groups' special rights--that determines ethnic diversity. Furthermore, there are aspects of one's behavior that can only be understood by tracing their ethnic origin, just as there are other behaviors that are shared by all those born and raised within American culture. However, I have come to the conclusion that the success of

this model in my classroom may depend on some reasons quite unrelated to its intellectual quality. These reasons include the fact that I am a foreigner, that the model has no connection with current American orthodoxy on multiculturalism, and that I do not so much teach about ethnicity as teach ethnicity. Indeed, what may be most useful about this anthropological model is its avoidance of the confrontational premise of so much of the current debate about multiculturalism that focuses on self-definition, on the one hand, and diversity management, on the other.

THE MULTICULTURALISM DEBATE

The national debate over multiculturalism, in general, and multicultural education, in particular, has contributed little to the solution of inter-ethnic tension in the USA. Despite numerous articles, debates, campus conferences and forums, the very term multiculturalism has come to signify all sorts of things to all sorts of people, while its literal meaning has become lost. This is a pity, because the reality that originally made the coinage of this term necessary has not changed and is not likely to do so in the future.

As immigration continues, the demographic composition of the USA keeps changing in the direction of diversity. The 1990 Census attests that 25% of the American population has "minority" origin. By 2050, the four major "official" minority groups--African-Americans, Hispanic-Americans, Asian Americans and Native Americans--will make up 47% of the entire population (W.P. O'Hare: *American Minorities: The Demographics of Diversity*, Population Reference Bureau, 1992). Obviously, the school system is going to be affected directly by this demographic pattern, particularly in view of the concentration of certain minority groups--notably those of Hispanic and Asian origin--in a limited number of states. Several of the largest school systems are already dealing with a situation of "majority minority" populations.

Indeed, the needs created by current and projected demographic changes are so

urgent that one reads current discussions of multiculturalism in growing disbelief that so little is being done so late. Meanwhile, the anthropologists sit bewildered, wondering why they never were consulted on a matter on which they obviously have something relevant to say. But do they? Does the American definition of multiculturalism involve any real interest in culture?

Judging from the educational strategies being developed--especially in terms of curricular changes in post-secondary education--culture does not play a large role. Rather, multiculturalism seems only to generate attempts at increasing the "curricular visibility" of underrepresented groups, be they women, people with disabilities, members of particular religious groups, or ethnic minorities. What is missing is any attempt to enable students to understand the cultural context or cultural content of ethnic groups, the anthropological perspective that would help students better understand the multicultural society developing all around them.

CULTURAL MINDFULNESS

While most students respond with enthusiasm to the assigned exercises of micro-behavioral analysis aimed at identifying their own ethnic-specific patterns of behavior, a few students feel that a long family history of inter-ethnic marriage has so complicated their heritage that no clear-cut ethnic style can be identified. As a consequence, these students often tell me--with great sadness--that conducting the exercises would be useless. When I point out that self-analysis exercises always reveal patterns and that, in their case, these may document their "Americanness" rather than a specific ethnic heritage, they look at me with both disbelief and hope. By the end of the semester, only a few of these students manage to overcome their skepticism about the reality of an overarching American culture and document its impact on their own expressive style. All of them, however, acquire a measure of "cultural mindfulness," and as their minds become more discriminating in matters of

cultural/ethnic diversity, they seem to get inoculated against discrimination.

CONCLUSION

The belief that a distinctive American culture does not exist is so widespread among Americans that I would say it constitutes a core aspect of the national ideology. This ideology has traditionally emphasized ethnicity as something "one becomes truly American by losing," creating a double cultural denial that boosts "rugged individualism" while contributing markedly to the weak sense of identity from which many Americans suffer. My classes often end up being a setting in which people develop strategies for overcoming their sense of ethnic and cultural deprivation. It is encouraging to see that, as these strategies develop, some attempts are made at analyzing the ethnic or cultural roots for the behavioral style of relevant others, a comparative framework is created, and hypotheses are advanced for possible reasons for interpersonal clashes.

The net result of this process is bewilderment, followed by awe, followed by a renewed sense of understanding, in turn leading to at least potential tolerance, respect, and acceptance. At the end of the course, some students thank me, while others express a certain amount of concern for having triggered a "cultural mindfulness" they are not sure they want or can handle. Still others ask me how they can pass on their new awareness of "what makes people tick" to others, especially their children. I often wonder what might be achieved if we "anthropologized" the K-12 curriculum and spread the belief that ethnic diversity is interesting, stimulating and precious.

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TEACHERS CORNER: TEACHING ETHNICITY THROUGH EXPRESSIVE STYLE

Teaching about American ethnicity is a great challenge. On the one hand, students need an introduction to the tremendous cultural diversity flourishing in the United States; on the other, teachers must beware of the "tortilla trap"--the danger of highlighting aspects of an ethnic subculture that may not be at all what insiders consider significant.

This Teacher's Corner, in two parts, describes an approach to teaching ethnicity by applying the anthropological concept of enculturation to the understanding of expressive style. By analyzing people's way of expressing themselves, students understand the "style" giving coherence to behavior and come to realize that style reflects both cultural and ethnic membership.

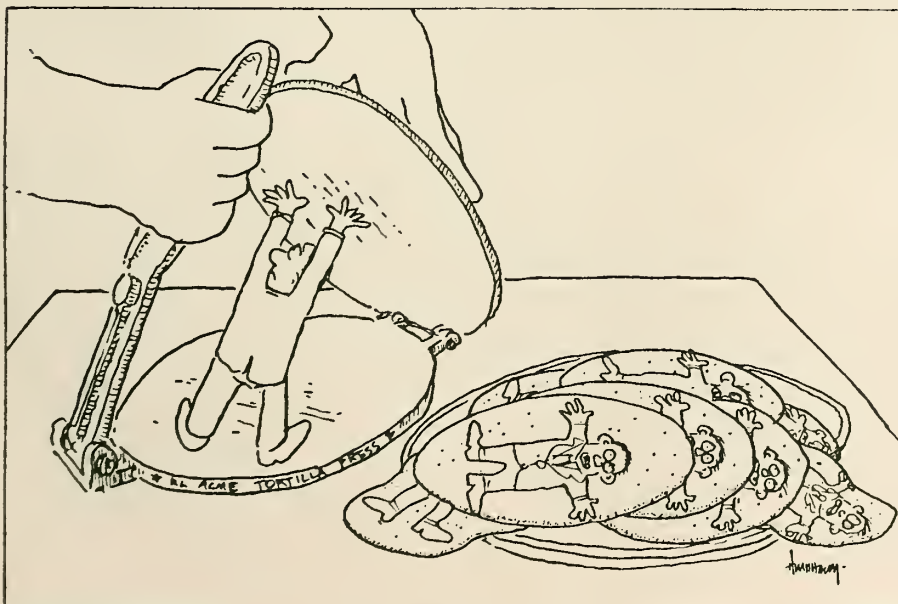
PART ONE: MUSIC, ART, LITERATURE, AND FILM

By exposing students to a carefully selected range of ethnic-specific expressions in music, art and literature, teachers can help students recognize the common humanity that all cultural/ethnic groups share. By calling attention to the way various forms of personal and aesthetic expression--from clothes to music, from cuisine to painting--

fit together into a coherent pattern, teachers can stimulate student interest in knowing more about how such patterns develop and why they vary. This takes students far beyond the view of diversity as bits and pieces of exotica, to be examined as if culture were something strange and peculiar.

This approach motivates students to find out how behavioral style in another culture affects areas of life they are particularly interested in--such as making friends, falling in love, or choosing a career--which in turn, leads them to dig deeper into the meaning such choices have. If nothing else, such study triggers an interest in analyzing their own expressive style, initiating a process of cultural self-reflection that can lessen ethnocentrism.

How does all this translate into classroom practice? This approach first requires analysis and discussion of three fundamental concepts: culture, subculture, and ethnic group. Next, students learn how cultural, subcultural, and ethnic-group membership affect expressive patterns. Only after students are familiar with the anthropological perspective on cultural variation and have been exposed to how this variation affects behavior, do they study the expressive style of selected American ethnic groups. The number of groups covered and the depth of analysis vary, but the range of expressive forms presented to my classes remains constant.



THE "TORTILLA TRAP"

Music

Generally, each ethnic-specific style is introduced to the students first through music. This is partly because young adults react strongly to sound, but mainly because the musical art form is the most content-free and stylistically specific. Students "get" the stylistic message of the music they hear quickly and easily. They can start free-associating images to the sounds they are exposed to and this gives them a context in which to assess the integration of ethnic expressive style. After playing select music from various ethnic groups, discussion follows from questions such as "what's the stylistic difference between jazz and rap?"; "where exactly does the hypnotic character of Native-American music come from?"; "why does Latin-American music make you want to move?". Such discussion also leads to better understanding of the process by which stereotypes can emerge from cross-cultural encounters.

Visual Expression

After musical encounters, students come face to face with visual expressions. These may be presented through slides or reproductions of illustrative paintings or sculptures. Frequently I use examples of less "artistic" but no less relevant forms, such as fashion, personal ornamentation, food presentation, home decorations, and body language. Through discussion of these materials, students sort through the distinction between form and content, the influence of style on personal taste, the individuality-commonality of artistic idiom, and the various levels at which symbolic meaning can be "read."

Literature

Once students understand that various levels of "reading" apply to all expressive forms, we move to literature through the analysis of short stories, poetry, and novel excerpts. These readings reinforce student appreciation of the linkage between content and form, and highlight the role of language as a powerful instrument for simultaneously expressing the universal and the particular, the culture-specific and the

ethnic-specific, the general and the personal. In this respect, I found the use of fictionalized autobiographical narratives particularly effective. The works of Louise Erdrich, John Okada, Carlos Bulosan, Maxine Hong Kingston, Oscar Hijuelos, Paula Marshall, Jo Pagano, and Maya Angelou are excellent examples of this type of writing and can be easily excerpted. Less conventional but no less powerful materials come from the poetry of Sandra Cisneros and LeRoi Jones/Amiri Baraka and even unorthodox choices such as Garrison Keillor's humorous prose can be put to very good use.

Stories can be an excellent vehicle for intercultural understanding; indeed, one of the aims of teaching literature is to stir what Robert Coles calls the "moral imagination" (*The Call of Stories: Teaching and the Moral Imagination*, 1989). Novelist Barbara Kingsolver has observed that:

Fiction creates empathy, and empathy is the antidote to meanness of spirit. Nonfiction can tell you about the plight of working people, of single mothers, but in a novel you become the character; touch what she touches, struggle with her self-doubt. Then when you go back to your own life, something inside you has maybe shifted a little. (*Newsweek* July 12, 1993:61).

This subtle shifting in the axis of a self-centered universe is precisely one of cultural anthropology's chief contributions and the capacity for sustained empathy one of the skills the discipline fosters.

Film

Without detracting from the value of literature, however, the expressive medium I consider most effective in heightening sensitivity to cultural and ethnic diversity is the feature film. Film combines the impact of a storyline--triggering catharsis--with enormous richness of documentation at the visual, auditory, and symbolic levels. Film simultaneously engages the senses, the emotions and the intellect. Film stays with you as image-specific memory and as content-based message. Film is a multifaceted

cultural document open to a variety of analyses, and, when chosen carefully, it can be a powerful vehicle for immersing students into a completely alien world.

By choosing films made by directors who are themselves members of the ethnic group represented, you can call your students' attention to the insider point of view in dramatic expression. By judiciously selecting "popular" films, you can facilitate comparisons of style and themes across groups. By highlighting the musical, visual, and fictional characteristics of the films presented, you can lead students toward integrating the knowledge they have already accumulated through exposure to other expressive media and facilitate their recognition of the ethnic group's overall style. On the practical side, the availability of videos for rent makes this approach easy and cost-effective, and the entertainment dimension of films manages to involve even the most disengaged student.

Because feature films are such a powerful medium, even brief excerpts make a great impact. With some careful previewing, you can select the most effective sections for consideration. As an extra bonus, I have found that the films that best illustrate ethnic style also tend to dispel the most generally-held stereotypical views of different groups, which even well-meaning films sometimes unwittingly reinforce. Thus, I use "Pow-Wow Highway" rather than "Thunderheart," "School Daze" rather than "Do the Right Thing," "Crossing Delancy" rather than "The Chosen," "True Love" rather than "Good Fellas," "A Great Hall" rather than "Dim Sum." Happily, ethnic cinema is a flourishing phenomenon and while some films--such as "El Norte" or "The Wash"--are likely to remain among my regular choices, I constantly add new titles to my selection list.

Conclusion

After almost a decade of experimenting with teaching ethnicity through expressive style, I believe this approach effectively modifies students' attitudes toward diversity in the direction of increased tolerance, understanding, and respect.

What's more, students seem to feel this way, too. Even in cases in which personal negative reactions to a particular group's expressive style do not become resolved through the analysis of it, students often express appreciation for at least achieving a clearer understanding of what specifically alienates them. It has long been an axiom of education that it is indispensable to know oneself in order to understand others. Cultural anthropology expands this view by teaching us that it is only by understanding others--in all their many varieties--that one can truly know oneself. The "expressive-style approach" facilitates this process and, at least occasionally, leads students to recognize that the "other" can really be a "brother."

Suggested Readings:

How ethnicity affects expressive style:

Kochman, T. *Black and White Styles in Conflict*. Chicago: The University of Chicago Press, 1981.

Longstreet, Wilma S. *Aspects of Ethnicity: Understanding Differences in Pluralistic Classrooms*. New York: Teacher's College Press, 1978.

Multimedia documentation of ethnic expressive styles (especially musical, artistic, and literary):

Ch'maj, Betty E. M. *Multicultural America*. Lanham, MD: University Press of America, 1993.

Two excellent anthologies of "ethnic" writings are:

Brown, Wesley and Amy Ling, eds., *Imagining America*. New York: Persea Books, 1991.

Perkins, Barbara and George Perkins, eds., *Kaleidoscope: Stories of the American Experience*. New York: Oxford University Press, 1993.

How to heighten intercultural understanding through films, and where to find useful films, read Summerfield, E. *Crossing*

Cultures through Film. Yarmouth, ME: Intercultural Press, 1993.

PART TWO: MICRO-BEHAVIORAL OBSERVATION EXERCISES

A: Non-Verbal Interaction Analysis

Ethnicity influences aspects of behavior that are clearly revealed in two-people interaction. By observing the way you express yourself in interaction with others, you can pinpoint some overall characteristics that, in turn, may reflect your identification with ethnic or subcultural groups.

1) Interactive DISTANCE (How close do you like to be to people when you interact with them? Pay attention to the range of your choices and what affects them most. Is it the relationship with the other person, the other person's sex-age-status, or the circumstances/setting of the interaction?)

2) TOUCHING (How often do you touch in standard interactions with: a stranger, an acquaintance, or a friend? Where do you touch this person? Examples of touching include: brushing, spot touching, hitting, holding. Which one do you use most often? How do you typically react to being touched by a stranger, an acquaintance, or a friend?)

3) Postural ORIENTATION (How do you position yourself in interaction? Possibilities include: face to face, at an angle, side by side, and back to back. Which do you choose most often in interacting with strangers, acquaintances, friends?)

4) Interactive GAZE (Eye contact can be direct, side-glance, peripheral, and absent. Which one characterizes your interactive gaze and which one do you find most comfortable receiving? What do you consider a comfortable gaze duration in interacting with strangers, acquaintances, friends?)

5) GESTURES (How often do you gesture during a typical episode of interaction? What parts of your body are involved? Do you combine gesturing with touching? Of

self or of your partner? Do you gesture with objects or only with free hands? How aware are you of your gesturing? What is the impact of a conscious restriction of gesturing on the quality of the interaction?)

Reference Source:

Hall, Edward T. *The Hidden Dimension.* Garden City, NY: Anchor Books, 1966.

B. Taste Orientation Analysis (Food)

Using the information given in class on the cultural specificity of basic culinary choices, try to answer these questions:

1) Which basic flavor combinations characterize the food you find most appealing for regular eating? (You need to pinpoint the basic flavoring ingredients. This is sometimes fairly simple--many people may be able to guess at least two of the basic flavors of Mexican cuisine: tomato/chili peppers/cumin--but it can also be quite complex.)

2) What staple food do you find especially difficult to do without? (Something basic you simply "must" have quite often.)

3) Whether or not you cook, what type of food preparation do you find most appropriate for festive occasions?

4) Which "look" do you enjoy most in the way food is presented on your plate?

On the basis of your answers, try to trace the ethnic background that most closely correlates to your choices. For example, if you most enjoy soy sauce/ginger/sugar-flavored foods, often "need" to eat rice, consider the preparation and partaking of soupy stews very cheering, and like food to be presented in small pieces, arranged with an eye to color and shape, your ethnic ancestry is most likely Japanese.

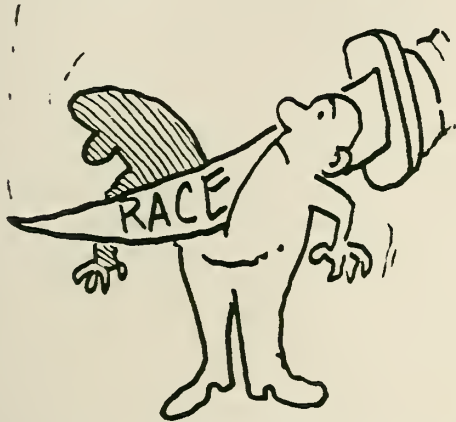
Reference Source:

Farb, P. and G. Armelagos. *Consuming Passions: The Anthropology of Eating.* New York: Pocket Books, 1980.

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("Race and Ethnicity" continued from p. 3)

change over time in response to natural selection, mutation, random events, and migration or hybridization, biological races are also limited in time. Can the human species be divided into populations that differ genetically from one another?



Many anthropologists today would argue that such a division is impossible, due to extensive migration and hybridization among human groups throughout human history. In a reaction to the discredited studies of the early 20th century, many anthropologists have pointed to the continuous or "clinal" nature of human variation, arguing that biological 'races,' in fact, do not exist. There is no line across the middle of the Sahara, or the Mediterranean, that divides people into "white" and "black," nor is there a north-south line in Eurasia dividing "whites" from "Mongoloids" (or "Asians"). Even the New World remained in genetic contact with the Old through the intermingling of seafaring peoples from both sides of the Bering Sea, as well as of Inuit and Norse in Greenland. Nor is there a set of criteria that will reliably differentiate members of these large racial groups. The use of skin color will group Africans with native peoples of Australia and south Indians, while the use of hair form and hair color will group the latter two with Europeans.

What about genetics? Should not a comparison of the genetics of different populations allow us to define differences and reconstruct historical relationships? Yes, argues L. L. Cavalli-Sforza of Stanford, who has used genetic traits determined

from blood samples to construct trees of relatedness for large numbers of human groups worldwide. Genetic traits unrelated to surface differences were once considered to reflect a deeper genetic relationship between peoples, unaffected by natural selection. We now know, however, that even such supposedly "neutral" features as your blood group (A, B, or O) are often subject to natural selection in a way that creates similarities in groups that are otherwise unrelated. For example, both the Irish and the Blackfoot Indians have similar frequencies of A blood; this is more likely to reflect a common disease history than any migration event of the past. People with A blood appear to have been more susceptible to smallpox, while people with O blood were more frequently felled by bubonic plague.



Rebecca Cann, of the University of Hawaii, has constructed trees based on the overall similarity of the mitochondrial DNA genomes in individuals of different populations. These trees often cluster individuals from different populations together, particularly in very diverse regions such as Africa. But J. Marks of Yale University, among others, cautions against the too rapid acceptance of population relationships based on DNA similarities. The degree of similarity between two strands of DNA is a subjective judgement, particularly if the strands are of different lengths, due to deletions or repetitions in one, relative to

the other. Furthermore, as long as we do not understand the relation-ship between particular DNA sequences and particular traits, we do not know what we are looking at.

Can we even define a local population of humans for the purpose of sampling it and comparing it to others? On a local level, geographers have demonstrated the existence of breeding populations in humans, reflected in the statistical tendency to select one's mate from within a certain radius. Even in industrialized societies of the 20th century, this radius may be surprisingly small: a mile or two in mid-20th century England (Molnar 1992: 195).



In each situation, however, the breeding population of "suitable" or even "actual" mates is always culturally circumscribed or expanded in ways that defy geographical proximity. Immigrants may be required to take a mate from their home population or encouraged to marry into the new one. Cultural rules may prescribe marriage to a cousin (Bedouin), or to the most geographically distant person available (ju/wasi).

Mates taken from outside the geographer's radius may bring changes to the genetic frequencies of the local population or even create new populations. African-American populations exhibit different genetic frequencies from those of their presumed parent populations in West and Central Africa, due to the American pattern of exogamy (mating outside one's group) among once separate African ethnic groups,

as well as gene flow with non-African populations in the Americas (primarily western Europeans and eastern Native Americans). In addition, African-Americans were exposed to a different set of natural selection factors in America--climatic, nutritional, and disease differences. For example, the Duffy blood group gene Fy^+ protects against a particularly deadly form of malaria called vivax malaria. Virtually 100% of contemporary West and Central Africans carry the Fy^+ gene and are protected against vivax malaria. European, Asian and Native American populations, on the other hand, maintain low frequencies of the Fy^+ gene and are susceptible to this infectious disease. Approximately 89-93% of African-Americans carry the Fy^+ gene, reflecting the results of the reduced natural selection pressure of vivax malaria in America as well as genetic change in non-African groups. Similarly, the gene frequencies of individuals classed as "White" in America, frequently reflect substantial percentages of genes that are more common in "non-Whites." This pattern strongly suggests that in the American environment, the flow of genes between formerly geographically distinct peoples has been multidirectional, influencing the subsequent composition of each group.

Restrictions on interbreeding within the geographer's average radius, due to caste or religious differences, for example, may create genetically differentiated groups that occupy the same local area. This has been the case in Ireland, where Catholics and Protestants rarely intermarry. As a result, differences within populations are often as great as differences between populations, making it almost impossible to assign individuals to particular groups, based on physical traits alone. Even in a case where some anthropologists argue for major "racial" differences, e.g. Khoisan vs. "Negroid", in actuality it is impossible to assign every individual to one or the other of these groups on physical grounds alone, just as it is impossible to assign individuals in America to the categories of the census on physical grounds alone. Within the African continent, for example, there is more physical, physiological, and genetic diversity, than among Africans and any

other group, or between Europeans and east Asians. At no time in the past did totally "pure" or "isolated" races exist.

A glance at most introductory texts of physical anthropology, however, shows that efforts to list a few major geographical subdivisions are still current, although always qualified by noting that not all individuals or populations can be put into the categories. Most of these lists closely approximate the original five races of Blumenbach, although some also elevate the Khoisan-speaking peoples of southern Africa to that level of distinctiveness, e.g. Homo sapiens hottentotus, also called Sanids (Baker, 1980: 303-324, 624) or Capoids. Interestingly, the greatest variation in these lists is in the treatment of what the US Census calls "Asian and Pacific Islanders." Where Blumenbach recognized only Mongolians and Malays, others, using 1950s studies by Stanley Garn, may divide the latter into Australians, Melanesians, Micronesians, and Polynesians. In addition, some taxonomies separate peoples of the Indian subcontinent as a separate race. Groups that are assumed to lie outside these large categories, or geographical races, from African-Americans to the Ainu of Japan, are either subsumed, ignored, or treated as curiosities, isolates, or 'hybrids'.

ETHNICITY INSTEAD OF RACE

As noted by Molnar, the term "race" is increasingly replaced in public documents and folk taxonomies by the term "ethnic group" or "ethnicity." Ethnicity is a more recent concept in anthropology than "race," although the underlying concept of "ethnos" or "ethnology," denoting a people distinguished by cultural traits is older, dating back to at least the mid-19th century. According to the *Oxford English Dictionary*, the term "ethnicity" was first used in 1953 by the sociologist David Reisman to explain how individuals and groups in multi-cultural settings shape their identities and their political and economic goals in terms of their interactions with one another.

How do groups (or the scholars who study them) construct or define the boundaries of an ethnic group? As in the case of race, two

contrasting views of ethnicity exist. The "primordialists" hold that ethnicity arises from similarities between individuals of the group in physical features and language. These features have the power to impart a sense of group and individual identity, of belonging to the community. Ethnicity in this view is "natural," and is based on biological (skin color, body shape) or linguistic affinities that are distinct from and prior to particular social or historic conditions.

In contrast, "instrumentalist" models hold that groups create ethnicity for political and economic interests. In this view, "ethnicity" is rationally oriented toward the fulfillment of specific goals like access to economic power, nationalism, or freedom from colonial rule.

Most scholars today reject these simplistic alternatives and hold the position that neither is sufficient to explain ethnic group structure and sentiment. Primordialism overlooks the fact that ethnic identity is not a natural feeling that simply emerges mysteriously in all human communities, but a complex and dynamic set of symbolic meanings patterned in history. Instrumentalists are so concerned with political and economic motivations that they sometimes ignore the question of how the particular elements or symbols of an ethnic identity are chosen. Ethnic consciousness may depend on perceived biological similarities, on a common language or linguistic structure, or on numerous cultural factors and learned behaviors ranging from religion to "styles" of speech and interaction.

Some ethnicities have been determined in large part by recent historical events such as colonization, nationalism or urbanism. In Ethiopia, the "Falasha" Jews were named by Amharic leaders (Falasha means "exile" in Amharic), while in Europe, the Bosnian Muslims identified themselves as Muslims both as a way to further their political power in previous Islamic states, and, more recently, as a form of resistance to Yugoslavian nationalism.

Other ethnicities have long histories. In Africa, the Hutu and Tutsi of Rwanda, and

the Tswana and Sarwa of Botswana predate the onslaught of European colonialism. Nor can the ethnic composition of nations in Europe, (Basques, Flemish), or northern Africa be explained as a correlate of modernity. This is not to imply that ethnic sentiments are "traditional" and unchanging, only that what people believe about their past has a direct relationship to what they are doing in the present. People may believe their ethnic ties are ancient, but the meaning and definition of these changes over time and differs according to historical circumstance. Ethnicity among Hutu and Tutsi, for example, while embedded in a long pre-colonial history, underwent drastic changes in just two years: 1959-61, when the states of Rwanda, Burundi, and Zaire were created. The Muslims of Bosnia, mobilized by ancestry and modern nationalism, do not fit neatly into either the primordialist or instrumentalist conceptions.

ETHNICITY AND STEREOTYPES

Like racial categories, ethnic categories have a static quality that can perpetuate stereotypes of cultural homogeneity and mask within-group variation. Categories such as "European-Americans," "African-Americans," "Hispanic-Americans," and "Asian-Americans" are comprised of many smaller culturally diverse groups. When we fail to recognize this internal variation, we perpetuate stereotypes that often do great disservice and assume that all members of each category are alike.

One benefit of an ethnic focus in anthropology is that it requires us to search for ways in which people, not nature, create their identities. Unfortunately, this emphasis has yet to broaden into public usage.

In the US census of 1970 and 1980, the clearest example of a "race" with little or no biological component was the category "Hispanic." This grouping originally was designed to encompass Spanish-speaking migrants from Latin America, who were also categorized as "brown" due to various admixtures of Africans; native South Americans; and peoples from Spain,

Portugal and other European (and Asian) countries. But, if the purpose was to define a biological entity, why should Europeans recently arrived from Spain, or non-Latin individuals who have acquired a Spanish surname through marriage, be included? Why should Spanish-speaking immigrants from Latin America with German surnames be excluded? How should Latin Americans of primarily African descent be categorized? In the 1990 census, the category "Hispanic" was redefined as an ethnic group, so that an individual can also classify him or herself by "race" as a "White," a "Black," or an "Indian" (Amer.). But what ethnic group combines Portuguese from Brazil and Argentineans of Welsh or Syrian descent, except with reference to the "Anglo" culture of the U.S.?

In the U.S., on the other hand, African-Americans or Blacks and European-Americans or Whites remain overemphasized, leading to increasing polarization between these groups, and creating false notions of biological and cultural homogeneity within these groups. Such practices, rooted in the political, economic, and historical circumstances of this nation, continue to obscure the very real commonalities shared by members of the same sex, class, community, or job category, as well as the common values and beliefs of a uniquely American culture that the two groups have jointly created.

If identities, whether racial or ethnic, are indeed cultural and historical constructs, then they are also changeable. At a time, when ethnicity is so often associated with violent conflict throughout the world, a conception of identity as mutable and contingent on circumstance may offer some optimism for the future.

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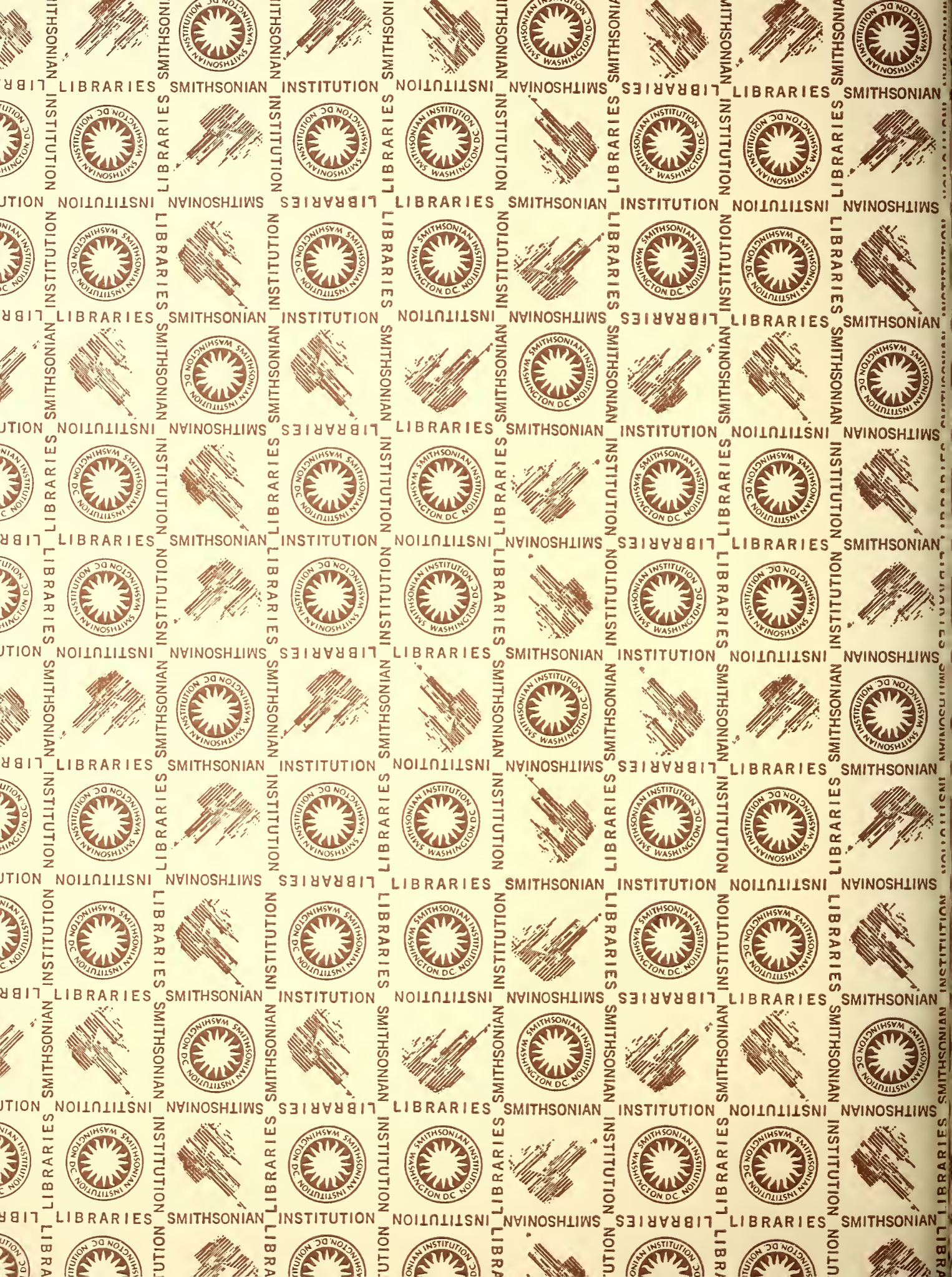
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